

# Adrenergic Receptor

**Beta Receptor** 

Adrenergic receptors are a class of G protein-coupled receptors that are targets of the catecholamines, especially norepinephrine and epinephrine. Many cells possess these receptors, and the binding of a catecholamine to the receptor will generally stimulate the sympathetic nervous system. The sympathetic nervous system is responsible for the fight-or-flight response, which includes widening the pupils of the eye, mobilizing energy, and diverting blood flow from non-essential organs to skeletal muscle. There are two main groups of adrenergic receptors,  $\alpha$  and  $\beta$ , with several subtypes.  $\alpha$  receptors have the subtypes  $\alpha$ 1 and  $\alpha$ 2.  $\beta$  receptors have the subtypes  $\beta$ 1,  $\beta$ 2 and  $\beta$ 3. All three are linked to Gs proteins, which in turn are linked to adenylate cyclase. Agonist binding thus causes a rise in the intracellular concentration of the second messenger cAMP. Downstream effectors of cAMP include cAMP-dependent protein kinase (PKA), which mediates some of the intracellular events following hormone binding.

## Adrenergic Receptor Inhibitors, Agonists, Antagonists, Activators & Modulators

## (+)-Penbutolol

((R)-Penbutolol; (+)-Isopenbutolol)

(+)-Penbutolol is a  $\beta\text{-}adrenoceptor$  antagonist, with an IC  $_{50}$  of 0.74  $\mu\text{M}.$  (+)-Penbutolol is an optical isomer of l-penbutolol with Na $^{+}$  channel-blocking action.

Cat. No.: HY-116790A

Purity: ≥95.0% Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## (4E)-SUN9221

(4E)-SUN9221 is a potent antagonist of  $\alpha 1\text{-}adrenergic\,receptor$  and 5-HT2 receptor, with antihypertensive and anti-platelet aggregation activities.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg



Cat. No.: HY-U00367

## (R)-(+)-Atenolol

Cat. No.: HY-B2111

(R)-(+)-Atenolol is the less active enantiomer of the (R,S)-atenolol. (R,S)-atenolol is a  $\beta\text{-}adrenergic$  receptor antagonist.

**Purity**: ≥99.0%

Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

## (R)-Carvedilol

((R)-BM 14190) Cat. No.: HY-B0006C

(R)-Carvedilol ((R)-BM 14190), the R-enantiomer of Carvedilol, is a non-selective  $\beta/\alpha\text{-}1$  blocker. (R)-Carvedilol exerts protection against the vascular or cardiac toxicity of Doxorubicin (DOX).



Purity: 99.05%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

## (R)-Carvedilol-d4

((R)-BM 14190-d4) Cat. No.: HY-B0006CS

(R)-Carvedilol-d4 is deuterium labeled (R)-Carvedilol. (R)-Carvedilol ((R)-BM 14190), the R-enantiomer of Carvedilol, is a non-selective  $\beta/\alpha$ -1 blocker. (R)-Carvedilol exerts protection against the vascular or cardiac toxicity of Doxorubicin (DOX).

**Purity:** > 98%

Clinical Data:

Size: 1 mg, 5 mg

## (R)-Metoprolol-d7

Cat. No.: HY-17503S1

(R)-Metoprolol-d7 is the deuterium labeled Metoprolol. Metoprolol (Toprol) is a selective  $\beta 1$  receptor blocker used in treatment of several diseases of the cardiovascular system, especially hypertension.

**Purity:** >98%

Clinical Data: No Development Reported

**Size:** 1 mg, 10 mg

## (R)-Propranolol hydrochloride

Cat. No.: HY-A0295

(R)-Propranolol hydrochloride is a less active enantiomer of the  $\beta$ -adrenoceptor antagonist propranolol (HY-B0573).

Purity: 99.36% Clinical Data: Launched Size: 100 mg

## (R)-Terazosin

(R)-Terazosin is an active R-enantiomer of

Terazosin. (R)-Terazosin is a potent  $\alpha$ 1-adrenoceptor antagonist with  $\mathbf{K}_{i}$  values of 6.51 nM, 1.01 nM and 1.97 nM for  $\alpha$ 1a,  $\alpha$ 1b and  $\alpha$ 1d-adrenoceptor, respectively.

Purity: 99.77% Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## (rac)-Dobutamine-d4 hydrochloride

Cat. No.: HY-15746S

(Rac)-Dobutamine-d4 hydrochloride is a labelled racemic Dobutamine hydrochloride. Dobutamine hydrochloride is a synthetic catecholamine that acts on  $\alpha 1$ -AR,  $\beta 1$ -AR,  $\beta 2$ -AR ( $\alpha$ -1,  $\beta$ -1 and  $\beta$ -2 adrenoceptors).

**Purity:** > 98%

Clinical Data:

Size: 2.5 mg, 1 mg, 10 mg, 25 mg

## (rac)-Dobutamine-d6 hydrochloride

Cat. No.: HY-15746S1

(Rac)-Dobutamine-d6 hydrochloride is a labelled racemic Dobutamine hydrochloride. Dobutamine hydrochloride is a synthetic catecholamine that acts on  $\alpha$ 1-AR,  $\beta$ 1-AR,  $\beta$ 2-AR ( $\alpha$ -1,  $\beta$ -1 and  $\beta$ -2 adrenoceptors).

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## (rac)-Nebivolol-d4

(Rac)-Nebivolol-d4 ((Rac)-R 065824-d4) is a labelled racemic Nebivolol, Nebivolol selectively inhibits  $\beta1$ - adrenergic receptor with  $IC_{50}$  of 0.8 nM.

Cat. No.: HY-B0203BS1

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## (rac)-Nebivolol-d8

(Rac)-Nebivolol-d8 ((rac)-R 065824-d8) is a labelled racemic Nebivolol, Nebivolol selectively inhibits  $\beta$ 1- adrenergic receptor with IC<sub>50</sub> of 0.8

Cat. No.: HY-B0203BS

Purity: >98%

Clinical Data:

Size: 500 μg, 1 mg, 5 mg, 10 mg

## (Rac)-Norepinephrine-d3 (formate)

Cat. No.: HY-13715S

(Rac)-Norepinephrine-d3 (formate) is deuterium labeled Norepinephrine. Norepinephrine (Levarterenol; L-Noradrenaline) is a potent adrenergic receptor (AR) agonist. Norepinephrine activates  $\alpha 1$ ,  $\alpha 2$ ,  $\beta 1$  receptors.

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## (Rac)-Rotigotine hydrochloride

Cat. No.: HY-15394

(Rac)-Rotigotine hydrochloride is a racemate of Rotigotine.



**Purity:** 98 66%

Clinical Data: No Development Reported

10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## (Rac)-Rotigotine-d7 hydrochloride

Cat. No.: HY-15394S

(Rac)-Rotigotine-d7 (hydrochloride) is deuterium labeled (Rac)-Rotigotine (hydrochloride). (Rac)-Rotigotine hydrochloride is a racemate of Rotigotine.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## (RS)-Butyryltimolol

Cat. No.: HY-102032A

(RS)-Butyryltimolol is the racemate of Butyryltimolol. Butyryltimolol, an effective prodrug of Timolol, improves the corneal penetration of Timolol. Butyryltimolol is a β-adrenergic blocker.



>98% Purity:

Clinical Data: No Development Reported

Size 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## (S)-(-)-Propranolol hydrochloride

Cat. No.: HY-B0573A

(S)-(-)-Propranolol hydrochloride is a  $\beta$ -adrenergic receptor antagonist with log K<sub>d</sub> values of -8.16, -9.08, and -6.93 for  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ , respectively.

≥97.0% Purity: Clinical Data: Launched 10 mM × 1 mL, Size:

## (S)-(-)-Propranolol-d7 hydrochloride

Cat. No.: HY-B0573AS

(S)-(-)-Propranolol-d7 hydrochloride is the deuterium labeled (S)-(-)-Propranolol hydrochloride. (S)-(-)-Propranolol hydrochloride is a β-adrenergic receptor antagonist with log  $K_d$  values of -8.16, -9.08, and -6.93 for  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ , respectively.

Purity: >98%

Clinical Data: No Development Reported

2.5 mg, 25 mg Size:

## (S)-Carvedilol

((S)-BM 14190) Cat. No.: HY-B0006B

(S)-Carvedilol, the S-enantiomer of Carvedilol, is a non-selective  $\beta/\alpha-1$  blocker. (S)-Carvedilol exerts protection against the vascular or cardiac toxicity of Doxorubicin (DOX).

Purity: 99.25%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

## (S)-Carvedilol-d4

((S)-BM 14190-d4)

Cat. No.: HY-B0006BS

(S)-Carvedilol-d4 is deuterium labeled (S)-Carvedilol. (S)-Carvedilol, the S-enantiomer of Carvedilol, is a non-selective  $\beta/\alpha-1$  blocker. (S)-Carvedilol exerts protection against the vascular or cardiac toxicity of Doxorubicin (DOX).

**Purity:** >98% Clinical Data:

Size: 1 mg, 5 mg

## (S)-Metoprolol-d7

Cat. No.: HY-17503S2

(S)-Metoprolol-d7 is the deuterium labeled Metoprolol, Metoprolol (Toprol) is a selective β1 receptor blocker used in treatment of several diseases of the cardiovascular system, especially hypertension.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## (S)-Phenylephrine-d6 hydrochloride

(S)-Phenylephrine-d6 (hydrochloride) is deuterium

labeled Phenylephrine (hydrochloride). (R)-(-)-Phenylephrine hydrochloride is a selective α1-adrenoceptor agonist with pKis of 5.86, 4.87 and 4.70 for  $\alpha$ 1D,  $\alpha$ 1B and  $\alpha$ 1A receptors respectively.

Cat. No.: HY-B0471S2

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## (S)-Terazosin

Cat. No.: HY-B0371D

(S)-Terazosin is an active S-enantiomer of Terazosin. (S)-Terazosin is a potent and high-affinity  $\alpha$ -adrenoceptor antagonist with  $K_i$ values of 3.91 nM, 0.79 nM and 1.16 nM for  $\alpha$ 1a,  $\alpha 1b$  and  $\alpha 1d$ -adrenoceptor, respectively.

**Purity:** 99 77%

Clinical Data: No Development Reported

10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## (S)-Timolol Maleate

(L-714,465 Maleate; MK 950)

(S)-Timolol Maleate (L-714,465 Maleate) is a non-cardioselective hydrophilic β-adrenoceptor blocker. (S)-Timolol Maleate is widely used as standard medication for intraocular pressure (glaucoma) by preventing the production of aqueous

humor.

**Purity:** 99.85% Clinical Data: Launched

10 mM × 1 mL, 100 mg, 200 mg



Cat. No.: HY-17380

#### (S)-Timolol-d9 maleate

(L-714,465-d9 maleate; MK 950-d9) Cat. No.: HY-17380S

(S)-Timolol-d9 (maleate) is deuterium labeled (S)-Timolol (Maleate). (S)-Timolol Maleate (L-714,465 Maleate) is a non-cardioselective hydrophilic β-adrenoceptor blocker.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## (±)-Befunolol

Cat. No.: HY-101752

(±)-Befunolol is a β-adrenoceptor blocking agent.

>98% Purity:

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## (±)-Penbutolol-d9 hydrochloride ((Rac)-Penbutolol-d9

hydrochloride; (±)-Isopenbutolol-d9 hydrochloride) Cat. No.: HY-116790BSA

(±)-Penbutolol-d9 ((Rac)-Penbutolol-d9) hydrochloride is a deuterium labeled (±)-Penbutolol hydrochloride. (+)-Penbutolol hydrochloride is a  $\beta$ -adrenoceptor antagonist, with an IC  $_{50}$  of 0.74  $\mu M.$ 

>98% Purity:

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg

## 2',5'-Dideoxyadenosine

Cat. No.: HY-135878

2',5'-Dideoxyadenosine is a potent and non-competitive adenylyl cyclase inhibitor via binding the P-site with an  $IC_{s0}$  of 3  $\mu M$  . 2',5'-Dideoxyadenosine is a nucleoside analog and exerts a potent antiadrenergic action in heart.



99.86% Purity:

Clinical Data: No Development Reported

4-Hydroxypropranolol hydrochloride

4-Hydroxypropranolol hydrochlorid is an active metabolite of Propranolol. 4-Hydroxypropranolol

((±)-4-hydroxy Propranolol hydrochloride)

10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 250 mg

## 2-Methoxyidazoxan monohydrochloride

(RX821002 hydrochloride) Cat. No.: HY-103197

2-Methoxyidazoxan monohydrochloride (RX821002 hydrochloride) is a highly selective alpha 2-adrenoceptor antagonist with little or no imidazoline antagonist effect.

Purity: 99.20%

Clinical Data: No Development Reported Size: 10 mg, 50 mg, 100 mg

Tel: 609-228-6898

Email: sales@MedChemExpress.com

>98% H-CI

Propranolol.

Clinical Data: No Development Reported

hydrochlorid is of comparable potency to

1 mg

Cat. No.: HY-100634

Fax: 609-228-5909

## 4-Hydroxypropranolol-d7

((±)-4-Hydroxy Propranolol-d7)

Cat. No.: HY-100634SA

- 4-Hydroxypropranolol-d7 ((±)-4-Hydroxy Propranolol-d7) is the deuterium labeled
- 4-Hydroxypropranolol hydrochloride.
- 4-Hydroxypropranolol hydrochlorid is an active metabolite of Propranolol.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## 4-Hydroxypropranolol-d7 hydrochloride

((±)-4-Hydroxy Propranolol-d7 hydrochloride)

Cat. No.: HY-100634S

4-Hydroxypropranolol D7 hydrochloride ((±)-4-hydroxy Propranolol D7 hydrochloride) is a deuterium labeled 4-Hydroxypropranolol hydrochloride.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## 5-HT2 antagonist 1

Cat. No.: HY-U00365

5-HT2 antagonist 1 is a potent antagonist of 5-HT2 receptor, with weak α1 adrenoceptor blocking activity.

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## A-61603

Cat. No.: HY-101366

A-61603 is a selective  $\alpha_{1A}$ -adrenergic receptor agonist. A-61603 increases the frequency of spontaneous Ca2+ transients in rat ventricular myocytes in vitro.

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg



## A55453

Cat. No.: HY-111188

A55453 is a prazosin analogue and a potent  $\alpha 1\text{-adrenergic}$  antagonist.  $^{1251}\text{-}A55453$  is a high-affinity alpha 1-adrenergic receptor probe.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **Aaptamine**

Aaptamine, a spongean alkaloid isolated from a sea sponge Aaptos aaptos, is a competitive antagonist of  $\alpha$ -adrenoceptor and activates the p21 promoter

in a p53-independent manner.

Cat. No.: HY-N4225

99.16% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Acebutolol D7

Cat. No.: HY-17497S

Acebutolol D7 is a deuterium labeled Acebutolol. Acebutolol is a selective β1 adrenergic receptor antagonist used in the treatment of hypertension, angina pectoris and cardiac arrhythmias.

>98% Purity:

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

## Acebutolol hydrochloride

Cat. No.: HY-17497A

Acebutolol hydrochloride is a **\( \beta 1 \) adrenergic** receptor (β1AR) antagonist. Acebutolol hydrochloride is used in the treatment of hypertension, angina pectoris and cardiac arrhythmias.

99.95% Purity: Clinical Data: Launched

10 mM × 1 mL, 50 mg, 100 mg

## ACTH (1-14)

(Adrenocorticotropic Hormone Fragment 1-14) Cat. No.: HY-P1582

ACTH (1-14) is a fragment of adrenocorticotrophin, which regulates cortisol and androgen production.

SYSMEHERWGKPVG

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## ACTH (1-14) (TFA)

(Adrenocorticotropic Hormone Fragment 1-14 TFA)

Cat. No.: HY-P1582A

ACTH (1-14) (TFA) is a fragment of

adrenocorticotrophin, which regulates cortisol and

androgen production.

SYSMEHFRWGKPVG (TFA salt)

Purity: 98.55%

Clinical Data: No Development Reported 1 mg, 5 mg, 10 mg

## ADRA1D receptor antagonist 1

ADRA1D receptor antagonist 1 is a potent, selective and orally active  $\alpha_{1D}$  adrenoceptor antagonist, with a K, of 1.6 nM.

Cat. No.: HY-135270

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## AGN 192836

AGN 192836 is a potent and selective  $\alpha 2$  adrenergic agonist with EC $_{so}$ s of 8.7, 41 and 6.6 nM for  $\alpha 2A$ ,  $\alpha 2B$  and  $\alpha 2C$  receptor, respectively.



Cat. No.: HY-100300

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **Ajmalicine**

(Raubasine) Cat. No.: HY-N1919

Ajmalicine (Raubasine) is found in herbs of Catharanthus roseus, is an antihypertensive drug used in the treatment of high blood pressure, decreases peripheral resistance and blood pressure.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Alfuzosin

(SL 77499) Cat. No.: HY-B0192

Alfuzosin is an  $\alpha 1$  adrenergic receptor antagonist used to treat benign prostatic hyperplasia (BPH).

Purity: 99.67% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg

## Alfuzosin hydrochloride

(SL 77499-10) Cat. No.: HY-B0192A

Alfuzosin hydrochloride is an  $\alpha 1$  adrenergic receptor antagonist used to treat benign prostatic hyperplasia (BPH).

Purity: 98.73% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg

## Alfuzosin-13C,d3

(SL 77499-13C,d3) Cat. No.: HY-B0192S1

Alfuzosin-13C,d3 is the 13C- and deuterium labeled.

Purity: >98% Clinical Data:

Size: 1 mg, 5 mg

## Alfuzosin-d3

(SL 77499-d3) Cat. No.: HY-B0192S2

Alfuzosin-d3 is deuterium labeled Alfuzosin.

**Purity:** > 98%

Clinical Data:

Size: 1 mg, 5 mg

## Alfuzosin-d3 hydrochloride

Cat. No.: HY-B0192AS

Alfuzosin-d3 hydrochloride is the deuterium labeled Alfuzosin hydrochloride. Alfuzosin hydrochloride is an  $\alpha 1$  adrenergic receptor antagonist used to treat benign prostatic hyperplasia (BPH).

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

Cat. No.: HY-A0275

## Alfuzosin-d7 hydrochloride

(SL 77499-10-d7) Cat. No.: HY-B0192AS1

Alfuzosin-d7 hydrochloride (SL 77499-10-d7) is the deuterium labeled Alfuzosin hydrochloride. Alfuzosin hydrochloride is an  $\alpha 1$  adrenergic receptor antagonist used to treat benign prostatic hyperplasia (BPH).

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Amezinium methylsulfate

(Amezinium metilsulfate; Lu-1631)

Amezinium metilsulfate has multiple mechanisms, including stimulation of alpha and beta-1 receptors and inhibition ofnoradrenaline and tyramine uptake.

e and H<sub>2</sub>N N N

Purity: 99.51% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg, 500 mg, 1 g

## Amibegron hydrochloride

(SR 58611A) Cat. No.: HY-103207

Amibegron hydrochloride is a selective β3-adrenoceptor agonist, with an EC<sub>so</sub> of 3.5 nM for  $\beta$ -adrenoceptor in rat colon; Amibegron hydrochloride has anxiolytic and antidepressant activity.

Purity: >98.0%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg

Purity: ≥95.0%

**Amitraz** 

(BTS-27419)

Clinical Data: No Development Reported Size:  $10 \text{ mM} \times 1 \text{ mL}, 100 \text{ mg}$ 

Amitraz is a non-systemic acaricide and

insecticide, with alpha-adrenergic agonist

the central nervous system and inhibition of monoamine oxidases and prostaglandin synthesis.

activity, interaction with octopamine receptors of

Cat. No.: HY-B1111

## Amitraz-d6

(BTS-27419-d6) Cat. No.: HY-B1111S

Amitraz-d6 (BTS-27419-d6) is the deuterium labeled Amitraz. Amitraz is a non-systemic acaricide and insecticide, with alpha-adrenergic agonist activity, interaction with octopamine receptors of the central nervous system and inhibition of monoamine oxidases and prostaglandin synthesis.

**Purity:** 

Clinical Data: No Development Reported

1 mg, 5 mg

## Amitriptyline hydrochloride

Cat. No.: HY-B0527A

Amitriptyline hydrochloride is an inhibitor of serotonin reuptake transporter (SERT) and noradrenaline reuptake transporter (NET), with Kis of 3.45 nM and 13.3 nM for human SERT and NET, respectively.



HCI

**Purity:** 99.56% Clinical Data: Launched

10 mM × 1 mL, 500 mg, 1 g, 5 g

# Amitriptyline-d3 hydrochloride

Cat. No.: HY-135096

Amitriptyline-d3 hydrochloride is the deuterium labeled Amitriptyline (hydrochloride).

Purity: >98%

Clinical Data: No Development Reported Size: 2.5 mg, 1 mg, 5 mg, 10 mg

## Amitriptyline-d6 hydrochloride

Cat. No.: HY-B0527AS

Amitriptyline-d6 hydrochloride is the deuterium labeled Amitriptyline hydrochloride.

>98% Purity:

Clinical Data: No Development Reported Size 2.5 mg, 1 mg, 5 mg, 25 mg

## Ancarolol

Cat. No.: HY-100141

Ancarolol is a beta-adrenergic blocking agent.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## AR-08

AR-08 is an agonist of  $\alpha$ 2-adrenergic receptor,

used for the treatment of attention deficit

hyperactivety disorder (ADHD).



Cat. No.: HY-U00371

>98% Purity: Clinical Data: Phase 2 Size: 1 mg, 5 mg

## **Arbutamine**

Cat. No.: HY-16056

Arbutamine is a short-acting, potent and nonselective  $\beta$ -adrenoceptor agonist that increases heart rate, cardiac contractility, and systolic blood pressure. Arbutamine is a catecholamine for a pharmacological cardiac stress agen.

Purity: ≥98.0% Clinical Data: Launched Size: 1 mg

## Arotinolol

Cat. No.: HY-122537A

Arotinolol is a nonselective  $\alpha/\beta$ -adrenergic receptor blocker and a vasodilating β-blocker. Arotinolol also shows potency for inhibiting the binding of the radioligand <sup>125</sup>I-ICYP to 5HT<sub>18</sub>-serotonergic receptor sites.

Purity: 98.23% Clinical Data: Launched

10 mM × 1 mL, 5 mg, 10 mg, 25 mg

## Asenapine

(Org 5222) Cat. No.: HY-10121

Asenapine (Org 5222), an atypical antipsychotic, is an antagonist of serotonin receptors (pK $_{i}$ : 8.4-10.5), adrenoceptors (pK $_{i}$ : 8.9-9.5), dopamine receptors (pK $_{i}$ : 8.9-9.4) and histamine receptors (pK $_{i}$ : 8.2-9.0).

Purity: 98.81% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Asenapine-d3

(Org 5222-d3)

Asenapine-d3 (Org 5222-d3) is the deuterium

labeled Asenapine.



Cat. No.: HY-10121S

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# Asenapine-d7

(Org 5222-d7) Cat. No.: HY-10121S1

Asenapine-d7 (Org 5222-d7) is the deuterium labeled Asenapine.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Atenolol

((RS)-Atenolol)

Atenolol ((RS)-Atenolol) is a cardioselective  $\beta 1$ -adrenergic receptor blocker, with a  $K_i$  of 697 nM at $\beta 1$ -adrenoceptor in guine pig left ventricle membrane. Atenolol can be used for the research of hypertension and angina pectoris.

THO OH NH;

Cat. No.: HY-17498

Purity: 99.61% Clinical Data: Launched

Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g

#### Atenolol-d7

((RS)-Atenolol-d7) Cat. No.: HY-17498S

Atenolol-d7 ((RS)-Atenolol-d7) is the deuterium labeled Atenolol, Atenolol ((RS)-Atenolol) is a cardioselective  $\beta 1$ -adrenergic receptor blocker, with a  $K_i$  of 697 nM at $\beta 1$ -adrenoceptor in guine pig left ventricle membrane. Atenolol can be used for the research of hypertension and angina pectoris.

**Purity:** >98%

Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

## Atipamezole

(MPV 1248) Cat. No.: HY-12380A

Atipamezole (MPV 1248) is a potent  $\alpha_2$ -adrenoceptor antagonist with a  $K_i$  of 1.6 nM.



Purity: 99.48% Clinical Data: Phase 1

Size: 10 mM × 1 mL, 10 mg, 50 mg

## Atipamezole hydrochloride

(MPV-1248 hydrochloride) Cat. No.: HY-12380

Atipamezole (MPV-1248) hydrochloride is a potent  $\alpha_2$ -adrenoceptor antagonist with a  $K_i$  of 1.6 nM.

H-CI

**Purity:** 99.41%

Clinical Data: Phase 1

Size: 10 mM × 1 mL, 10 mg, 50 mg

## Atomoxetine-d3 hydrochloride

Cat. No.: HY-110223

**Purity:** >98%

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg

## Azepexole dihydrochloride

(B-HT 933 dihydrochloride; Oxazoloazepin dihydrochloride) Cat. No.: HY-103212

Azepexole (B-HT 933) dihydrochloride is a potent and selective alpha 2-adrenoceptor agonist with pKs of 8.3, 7.6, and 7.5 for  $\alpha$ 2A-,  $\alpha$ 2B- and  $\alpha$ 2C-adrenoceptor subtypes, resepctively.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **Bambuterol**

((±)-Bambuterol; KWD-2183)

Bambuterol ((±)-Bambuterol; KWD-2183) is a long acting beta-adrenoceptor agonist (LABA) used in the treatment of asthma; it also is a prodrug of terbutaline.



Cat. No.: HY-17501

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 25 mg

## Bambuterol hydrochloride

((±)-Bambuterol hydrochloride; KWD-2183 hydrochloride) Cat. No.: HY-17501A

Bambuterol hydrochloride ((±)-Bambuterol hydrochloride; KWD-2183 hydrochloride) is a long acting beta-adrenoceptor agonist (LABA) used in the treatment of asthma; it also is a prodrug of terbutaline.

Purity: 99.64% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Bambuterol-d9 hydrochloride ((±)-Bambuterol-d9 hydrochloride;

KWD-2183-d9 hydrochloride)

Bambuterol-D9 ((±)-Bambuterol-D9) hydrochloride is the deuterium labeled Bambuterol. Bambuterol ((±)-Bambuterol) hydrochloride is a long acting beta-adrenoceptor agonist (LABA) used in the treatment of asthma; it also is a prodrug of terbutaline.

**Purity:** >98%

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg



Cat. No.: HY-17501S

Batefenterol

(GSK961081; TD-5959) Cat. No.: HY-12980

Batefenterol (GSK961081;TD-5959) is a novel muscarinic receptor antagonist and  $\beta_2$ -adrenoceptor agonist; displays high affinity for hM2, hM3 muscarinic and  $h\beta_2$ -adrenoceptor with  $K_i$  values of 1.4, 1.3 and 3.7 nM, respectively.



Purity: 98.08% Clinical Data: Phase 2

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Benzquinamide

(P2647; BZQ; Benzoquinamide)

Benzquinamide (P2647) is an antiemetic which can bind to the  $\alpha_{2A'}$   $\alpha_{2B'}$  and  $\alpha_{2C}$  adrenergic receptors ( $\alpha$ 2-AR) with K, values of 1,365, 691, and 545 nM, respectively.



Cat. No.: HY-U00244

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

Besipirdine
(HP 749 free base)

## Benzquinamide-d3 hydrochloride

Cat. No.: HY-U00244S

Benzquinamide-d3 hydrochloride is the deuterium labeled Benzquinamide hydrochloride. Benzquinamide (P2647) is an antiemetic which can bind to the  $\alpha_{\rm Ze}$ ,  $\alpha_{\rm Ze}$  and  $\alpha_{\rm Zc}$  adrenergic receptors (c2-AR) with  $\rm K_1$  values of 1,365, 691, and 545 nM, respectively.

D D O O HC

**Purity:** >98%

Clinical Data: No Development Reported

**Size**: 2.5 mg, 25 mg

Purity: >98%

potassium channels.

Clinical Data: No Development Reported

Besipirdine is a non-receptor-dependent

cholinomimetic agent with noradrenergic activity. Besipirdine inhibits voltage-dependent sodium and

Size: 1 mg, 5 mg

# N N

Cat. No.: HY-15376

**Betaxolol** 

Cat. No.: HY-B0381

Betaxolol is a selective **beta1** adrenergic **receptor** blocker that can be used for the research of hypertension and glaucoma.

Purity: 95.06% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Betaxolol hydrochloride

(SL75212) Cat. No.: HY-B0381A

Betaxolol Hydrochloride is a selective **beta1** adrenergic receptor blocker that can be used for the research of hypertension and glaucoma.

Purity: 98.69% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Betaxolol-d5

Cat. No.: HY-B0381S

Betaxolol-d5 is the deuterium labeled Betaxolol. Betaxolol is a selective **beta1** adrenergic **receptor** blocker that can be used for the research of hypertension and glaucoma.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Betaxolol-d7 hydrochloride

(SL75212-d7) Cat. No.: HY-B0381AS

Betaxolol-d7 hydrochloride (SL75212-d7) is the deuterium labeled Betaxolol hydrochloride.
Betaxolol Hydrochloride is a selective **beta1 adrenergic receptor** blocker that can be used for the research of hypertension and glaucoma.



Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Bevantolol

Cat. No.: HY-A0249

Bevantolol is a selective  $\beta$ -1 adrenoceptor antagonist. Bevantolol can be used for the research of angina pectoris and hypertension.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Bevantolol hydrochloride

Bevantolol hydrochloride is a selective  $\beta 1$  and  $\alpha 1$ -adrenergic receptor antagonist with  $pK_i$  values of 7.83, 6.9 in rat cerebral cortex, respectively. Bevantolol hydrochloride is a potent  $Ca^{2+}$ 

**Purity:** ≥98.0%

Clinical Data: Launched

Size: 10 mM × 1 mL, 25 mg, 50 mg, 100 mg



Cat. No.: HY-121186

# BI-167107

Cat. No.: HY-121251

BI-167107 is a high affinity, full agonist that binds to the  $\beta 2$  adrenergic receptor ( $\beta 2AR)$  with a dissociation constant  $K_d$  of 84 pM.

Purity: 99.81%

Clinical Data:

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Bisoprolol

antagonist.

Bisoprolol is a potent, selective and orally

active  $\beta 1$ -adrenergic receptor blocker. Bisoprolol has little activity on  $\beta 2$ -receptor and has the potential for hypertension, coronary artery disease and stable ventricular dysfunction research.

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg



Cat. No.: HY-129029

Bisoprolol hemifumarate

Cat. No.: HY-B0076

Bisoprolol hemifumarate is a selective type  $\beta 1$  adrenergic receptor blocker.

Purity: 99.65% Clinical Data: Launched

Size:  $10 \text{ mM} \times 1 \text{ mL}$ , 50 mg, 100 mg, 200 mg, 500 mg

## Bisoprolol-d5

Cat. No.: HY-129029S

Bisoprolol-d5 is the deuterium labeled Bisoprolol. Bisoprolol is a potent, selective and orally active  $\beta 1$ -adrenergic receptor blocker.

TO SOUTH TO SOUTH

**Purity:** >98%

Clinical Data: No Development Reported

**Size:** 1 mg, 10 mg

## Bisoprolol-d7 hemifumarate

Cat. No.: HY-B0076S

Bisoprolol-d7 hemifumarate is the deuterium labeled Bisoprolol hemifumarate. Bisoprolol hemifumarate is a selective type  $\beta 1$  adrenergic receptor blocker.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Blonanserin

(AD-5423) Cat. No.: HY-13575

Blonanserin (AD-5423) is a potent and orally active  $\mathbf{5}\text{-HT}_{2A}$  ( $\mathbf{K}_i$ =0.812 nM) and **dopamine D2 receptor** ( $\mathbf{K}_i$ =0.142 nM) antagonist.



Purity: 98.73% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 25 mg, 100 mg

## **BMY 7378**

Cat. No.: HY-100554

BMY 7378 is a selective antagonist of  $\alpha_{\rm 1D}$ -adrenoceptor  $(\alpha_{\rm 1D}$ -AR). BMY 7378 binds to membranes expressing the cloned rat  $\alpha_{\rm 1D}$ -AR with a >100-fold higher affinity (K<sub>i</sub>=2 nM) than binding to either the cloned rat  $\alpha_{\rm 1a}$ -AR (K<sub>i</sub>=800 nM) or the hamster  $\alpha_{\rm 1B}$ -AR (K<sub>i</sub>=600 nM).

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## BMY-14802 hydrochloride

(BMY-14802-1; BMS 181100 hydrochloride)

BMY-14802 hydrochloride (BMY-14802-1) is a selective and orally active sigma receptor antagonist with an IC $_{50}$  of 112 nM. BMY-14802 hydrochloride is also a 5-HT1A and adrenergic  $\alpha$ 1 receptors agonist. BMY-14802 hydrochloride has antipsychotic effects.

PH-CI

Cat. No.: HY-108509

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **Bometolol Hydrochloride**

Cat. No.: HY-U00386

Bometolol Hydrochloride is a beta-adrenergic blocking agent, used for the research of cardiovascular disease.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

**Bopindolol** ((±)-Bopindolol)

Bopindolol is an orally active antagonist of β-adrenoceptors (ARs) with partial agonist activity. Bopindolol is non-selective for  $\beta1$ - and  $\beta$ 2-ARs and has low affinity for  $\beta$ 3-AR subtype.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg



Cat. No.: HY-B1562

## **Bopindolol fumarate**

((±)-Bopindolol fumarate)

Bopindolol ((±)-Bopindolol) fumarate is an orally active antagonist of  $\beta$ -adrenoceptors (ARs) with partial agonist activity. Bopindolol fumarate is non-selective for  $\beta$ 1- and  $\beta$ 2-ARs and has low affinity for β3-AR subtype.

Clinical Data: No Development Reported

1 mg, 5 mg

**Brimonidine** 

Cat. No.: HY-B1562C (UK 14304; AGN190342)

Brimonidine (UK 14304) is a full α2-adrenergic receptor (α2-AR) agonist.



Cat. No.: HY-B0659

**Purity:** 99 99% Clinical Data: Launched

10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

#### Brimonidine tartrate

(UK 14304 tartrate; AGN190342 tartrate)

Brimonidine tartrate (UK 14304 tartrate) is a full  $\alpha$ 2-adrenergic receptor ( $\alpha$ 2-AR) agonist.

Cat. No.: HY-B0659A

Purity: 99.19% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg, 500 mg

## Brimonidine-d4

Brimonidine-d4 is the deuterium labeled Brimonidine. Brimonidine (UK 14304) is a full  $\alpha$ 2-adrenergic receptor ( $\alpha$ 2-AR) agonist.

Cat. No.: HY-B0659S

**Purity:** >98% Clinical Data: Launched Size 1 mg, 10 mg

## Brimonidine-d4 D-tartrate

Cat. No.: HY-B0659AS

Brimonidine-d4 (UK 14304-d4) D-tartrate is the deuterium labeled Brimonidine D-tartrate.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## BRL 37344 sodium

(BRL 37344A)

BRL 37344 sodium (BRL 37344A) is a specific β3-adrenergic receptor agonist. BRL 37344 sodium treatment significantly lowers the body weight of obese mice.

Cat. No.: HY-101325

≥98.0% Purity:

Clinical Data: No Development Reported

Size:

## **Brombuterol D9**

(Bromobuterol D9) Cat. No.: HY-131104S

Brombuterol D9 (Bromobuterol D9) is a deuterium labeled Brombuterol. Brombuterol is a  $\beta$ -adrenergic receptor agonist.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Brombuterol D9 hydrochloride

(Bromobuterol D9 hydrochloride)

Brombuterol D9 hydrochloride (Bromobuterol D9 hydrochloride) is a deuterium labeled Brombuterol hydrochloride. Brombuterol hydrochloride is a β-adrenergic receptor agonist.

Cat. No.: HY-131104AS

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Brombuterol hydrochloride

(Bromobuterol hydrochloride)

Brombuterol hydrochloride (Bromobuterol hydrochloride) is a **β-adrenergic receptor** agonist.

Cat. No.: HY-131145

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Bromchlorbuterol hydrochloride

Bromchlorbuterol hydrochloride is an active  $\beta$ -adrenergic agonist ( $\beta$ -agonist) and can be used for the research of pulmonary disease and asthma.

Cat. No.: HY-136449

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **Bucindolol**

Cat. No.: HY-103214

Bucindolol is a  $\beta$ 1-adrenergic receptor blocker, with intrinsic sympathomimetic activity, used in the research of heart failure.

Purity: 99.96%

Clinical Data: No Development Reported

Size: 5 mg

## **Bufuralol hydrochloride**

(Ro 3-4787 hydrochloride)

Bufuralol hydrochloride (Ro 3-4787 hydrochloride) is a potent non-selective, orally active  $\beta$ -adrenoreceptor antagonist with partial agonist activity. Bufuralol hydrochloride is a CYP2D6 probe substrate.

O OH NH

Cat. No.: HY-105124A

**Purity:** ≥99.0%

Clinical Data: No Development Reported

Size: 5 mg

#### Bunazosin

Cat. No.: HY-107326

Bunazosin is a potent and selective  $\alpha 1$ -adrenoceptor antagonist. Bunazosin can be used for antihypertensive and ocular hypotensive research.

**Purity:** 98.52%

Clinical Data: No Development Reported

**Size:** 5 mg, 10 mg

## Bupranolol

Bupranolol is an orally active, competitive and non-selective  $\beta$ -adrenoceptor antagonist without intrinsic sympathomimetic activity.

O N

Cat. No.: HY-A0252

**Purity:** 99.44%

Clinical Data: No Development Reported

Size: 25 mg

## Bupranolol-d9

Cat. No.: HY-A0252S

Bupranolol-d9 is the deuterium labeled Bupranolol. Bupranolol is an orally active, competitive and non-selective  $\beta$ -adrenoceptor antagonist without intrinsic sympathomimetic activity.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Butyryltimolol

Butyryltimolol, an effective prodrug of Timolol, improves the corneal penetration of Timolol. Butyryltimolol is a  $\beta$ -adrenergic blocker.

Cat. No.: HY-102032

**Purity:** >98%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Carazolol

((±)-Carazolol; DL-Carazolol; Suacron) Cat. No.: HY-107327

Carazolol is a  $\beta_1/\beta_2$  adrenoceptor antagonist of high potency used in the research of hypertension. Carazolol is also a potent, selective  $\beta_3$ -adrenoceptor agonist.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Carteolol hydrochloride

(OPC-1085 hydrochloride)

Carteolol hydrochloride (OPC-1085 hydrochloride) is a non-selective beta blocker used to treat glaucoma.



Cat. No.: HY-17495A

Purity: 99.96% Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg, 100 mg

## Carteolol-d9 hydrochloride

(OPC-1085-d9 hydrochloride) Cat. No.: HY-17495AS

Carteolol-d9 (OPC-1085-d9) hydrochloride is the deuterium labeled Carteolol hydrochloride. Carteolol hydrochloride (OPC-1085 hydrochloride) is a non-selective beta blocker used to treat glaucoma.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Carvedilol phosphate hemihydrate

(BM 14190 phosphate hemihydrate)

Carvedilol phosphate hemihydrate (BM 14190 phosphate hemihydrate) is a non-selective  $\beta/\alpha-1$ blocker. Carvedilol phosphate hemihydrate inhibits lipid peroxidation with an IC  $_{50}$  of 5  $\mu M$ .

Cat. No.: HY-B0006A

**Purity:** >98% Clinical Data: Launched 1 mg, 5 mg

# 10 mM × 1 mL, 100 mg, 500 mg

Carvedilol-d3

heart failure.

**Purity:** 

Size:

Carvedilol

(BM 14190)

Cat. No.: HY-B0006S

AA is the deuterium labeled Carvedilol. Carvedilol (BM 14190) is a non-selective  $\beta/\alpha-1$  blocker. Carvedilol inhibits lipid peroxidation in a dose-dependent manner with an IC  $_{50}$  of 5  $\mu M.$ 

Carvedilol (BM 14190) is a non-selective  $\beta/\alpha-1$ 

blocker. Carvedilol inhibits lipid peroxidation in

a dose-dependent manner with an  $IC_{so}$  of 5  $\mu M$ .

Carvedilol is a multiple action antihypertensive

99 87%

Clinical Data: Launched

agent with potential use in angina and congestive

Cat. No.: HY-B0006

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 10 mg

## Carvedilol-d4

(BM 14190-d4) Cat. No.: HY-B0006S1

Carvedilol-d4 (BM 14190-d4) is the deuterium labeled Carvedilol. Carvedilol (BM 14190) is a non-selective  $\beta/\alpha-1$  blocker. Carvedilol inhibits lipid peroxidation in a dose-dependent manner with an  $IC_{50}$  of 5  $\mu$ M.

Purity: >98%

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg

# Carvedilol-d5

(BM 14190-d5) Cat. No.: HY-B0006S2

Carvedilol-d5 is deuterium labeled Carvedilol. Carvedilol (BM 14190) is a non-selective  $\beta/\alpha-1$ blocker. Carvedilol inhibits lipid peroxidation in a dose-dependent manner with an IC50 of 5  $\mu$ M.

>98% Purity:

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## Celiprolol hydrochloride

Cat. No.: HY-B1264

Celiprolol hydrochloride is a potent, selective and orally active antagonist of \$1-andrenoceptor with partial β2 agonist activity, therefore it is a selective adrenoreceptor modulator (SAM). Celiprolol hydrochloride demonstrates antihypertensive and antianginal activity.

Purity: >98% Clinical Data: Launched Size: 1 mg, 5 mg

## Centanafadine

(EB-1020) Cat. No.: HY-16736

Centanafadine is dual norepinephrine (NE)/dopamine (DA) transporter inhibitor, also inhibits serotonin transporter, with IC<sub>so</sub>s of 6 nM, 38 nM and 83 nM for human NE, DA and serotonin transporter, respectively.



Purity: >98% Clinical Data: Phase 3 Size: 1 mg, 5 mg

## Centanafadine hydrochloride

(EB-1020 hydrochloride) Cat. No.: HY-16736A

Centanafadine (hydrochloride) is dual norepinephrine (NE)/dopamine (DA) transporter inhibitor, also inhibits serotonin transporter, with IC<sub>50</sub>s of 6 nM, 38 nM and 83 nM for human NE, DA and serotonin transporter, respectively.



HCI

Purity: 99.93%

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Centanafadine-d7 hydrochloride

(EB-1020-d7 hydrochloride)

Centanafadine-d7 (EB-1020-d7) hydrochloride is the deuterium labeled Centanafadine hydrochloride.



Cat. No.: HY-16736AS

>98%

Clinical Data: No Development Reported

1 mg, 5 mg

HCI

## CGP 20712 A

(CGP 20712 mesylate) Cat. No.: HY-101355B

CGP 20712 A (CGP 20712 mesylate) is a highly selective <B>β1-adrenoceptor</B> antagonist with an  $IC_{so}$  of 0.7 nM. CGP 20712 A exhibits ~10,000-fold selectivity over β2-adrenoceptors.

Purity: ≥98.0%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

## Cicloprolol hydrochloride

Cat. No.: HY-U00066

Cicloprolol is a partial β 1-adrenoceptor

agonist.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Cimbuterol-D9

Cat. No.: HY-131105S

Cimbuterol-D9 is the deuterium labeled Cimbuterol. Cimbuterol is a β-adrenergic agonist.

**Purity:** >98%

Clinical Data: No Development Reported 1 mg, 5 mg, 10 mg

## CL 316243

Cat. No.: HY-116771A

CL316243 is a highly potent selective  $\beta$ 3-adrenoceptor agonist with a EC<sub>50</sub> of 3 nM,

but is an extremely poor to

β1/2- receptors.

Purity: 98.57%

Clinical Data: No Development Reported 10 mM × 1 mL, 5 mg, 10 mg

## Clenproperol

Cat. No.: HY-100699

Clenproperol is a **\(\beta\)2-adrenergic** agonist.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Clenproperol-D7

Cat. No.: HY-100699S

Clenproperol-D7 is the deuterium labeled Clenproperol. Clenproperol is a \$2-adrenergic agonist.

>98% Purity:

Clinical Data: No Development Reported 1 mg, 5 mg, 10 mg Size:

## Clonidine

Cat. No.: HY-12721

Clonidine is an alpha 2-adrenergic agonist.

99.93% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg, 100 mg

## Clonidine hydrochloride

Cat. No.: HY-B0409A

Clonidine hydrochloride is an agonist of α2-adrenoceptor and potent antihypertensive

agent.

**HCI** 

99.96% Purity:

## Clinical Data: Launched

10 mM × 1 mL, 100 mg, 500 mg

## Clonidine-d4 hydrochloride

Cat. No.: HY-12721S

Clonidine-d4 hydrochloride is the deuterium labeled Clonidine. Clonidine hydrochloride is an alpha 2-adrenergic agonist.

Purity: >98%

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg

## Clorprenaline

Cat. No.: HY-134577

Clorprenaline is a potent agonist of **B2-adrenergic**. Clorprenaline promotes animal muscular mass growth and decreases fat accumulation. Clorprenaline is a potential new lean meat-boosting feed additive.

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Clorprenaline D7

Cat. No.: HY-131106S

Clorprenaline D7 is a deuterium labeled Clorprenaline. Clorprenaline is a  $\beta$ 2-adrenergic receptor agonist that is implicated in bronchial expansion. Clorprenaline has the potential for asthma research.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# Clorprenaline hydrochloride

Clorprenaline hydrochloride is a  $\beta_2$ -adrenergic receptor agonist that is implicated in bronchial expansion. Clorprenaline has the potential for asthma research.



Cat. No.: HY-B1347

Purity: 99.59% Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg

## D2343

Cat. No.: HY-U00206

D2343 is a  $\beta 2$ -adrenoceptor agonist and also is an  $\alpha 1$ - adrenoceptor inhibitor.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Dabuzalgron

(Ro 115-1240)

Dabuzalgron (Ro 115-1240) is an orally active and selective  $\alpha$ -1A adrenergic receptor agonist for the treatment of urinary incontinence. Dabuzalgron protects against Doxorubicin-induced cardiotoxicity by preserving mitochondrial function.

H O S

Cat. No.: HY-117071

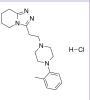
**Purity:** 98.72%

Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

## Dapiprazole hydrochloride

Cat. No.: HY-A0142A

Dapiprazole hydrochloride is a potent  $\alpha$ -adrenergic blocking drug, which is used to reverse mydriasis after eye examination.



Purity: 99.44% Clinical Data: Launched

Size:  $10 \text{ mM} \times 1 \text{ mL}$ , 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Denopamine

((R)-(-)-Denopamine; TA-064)

Denopamine ((R)-(-)-Denopamine) is an orally active, selective  $\beta 1$ -adrenergic agonist. Denopamine prolongs survival in a murine model of congestive heart failure induced by viral myocarditis: suppression of tumor necrosis factor- $\alpha$  production in the heart. Cardiovascular effects.

OH OH

Cat. No.: HY-119515

**Purity:** >98%

Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

## Deriglidole

(SL 86-0715) Cat. No.: HY-101683

Deriglidole is a peripheral adrenoceptor antagonist with a high affinity for  $\alpha_3$ -adrenoceptors.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Detomidine

Detomidine, an imidazole derivative, is a potent  $\alpha 2$ -adrenergic agonist. Detomidine produces dose-dependent analgesic effects.



Cat. No.: HY-B0163

Purity: >98% Clinical Data: Launched

Size: 5 mg, 10 mg, 25 mg

## Detomidine carboxylic acid

Cat. No.: HY-135895

Detomidine carboxylic acid is the major urinary metabolite of Detomidine. Detomidine is a synthetic  $\alpha 2\text{-}adrenergic}$  agonist. Detomidine also has cardiac and respiratory effects and an antidiuretic action.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Detomidine hydrochloride

Cat. No.: HY-B0163A

Detomidine hydrochloride, an imidazole derivative, is a potent  $\alpha 2$ -adrenergic agonist. Detomidine hydrochloride produces dose-dependent analgesic effects.



Purity: 99.82% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

### Dexmedetomidine

against  $\alpha 1$ -adrenoceptor.

((+)-Medetomidine; (S)-Medetomidine)

Dexmedetomidine ((+)-Medetomidine) is a potent, selective and orally active agonist of α2-adrenoceptor, with a K<sub>i</sub> of 1.08 nM. Dexmedetomidine shows 1620-fold selectivity

Purity: 99 63% Clinical Data: Launched Size: 10 mM × 1 mL, 5 mg

Cat. No.: HY-12719

Dexmedetomidine-13C,d3 (hydrochloride) is the 13Cand deuterium labeled. Dexmedetomidine hydrochloride ((+)-Medetomidine hydrochloride) is a potent, selective and orally active agonist of α2-adrenoceptor, with a Ki of 1.08 nM.

hydrochloride; (S)-Medetomidine-13C,d3 hydrochloride)

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Dibenamine hydrochloride

(N-(2-Chloroethyl)dibenzylamine hydrochloride) Cat. No.: HY-128380

Dibenamine hydrochloride is a competitive and irreversible adrenergic blocking agent and is known to modify the pharmacological effects of epinephrine. Dibenamine hydrochloride cause a significant increase in the rate of destruction of I-epinephrine in the mouse.

≥98.0% Purity:

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 250 mg

H-CI

## DL-Norepinephrine hydrochloride

Cat. No.: HY-N7142

DL-Norepinephrine hydrochloride is a synthetic phenylethylamine that mimics the sympathomimetic actions of the endogenous

norepinephrineDL-Norepinephrine hydrochloride is a neurotransmitter targets  $\alpha 1$  and  $\beta 1$ adrenoceptors, has an increasing effect...

99.59% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg

## Dobutamine hydrochloride

Cat. No.: HY-15746

Dobutamine hydrochloride is a synthetic catecholamine that acts on  $\alpha$ 1-AR,  $\beta$ 1-AR,  $\beta$ 2-AR  $(\alpha-1, \beta-1 \text{ and}\beta-2 \text{ adrenoceptors})$ . Dobutamine hydrochloride is a selective β1-AR agonist, relatively weak activity at  $\alpha$ 1-AR and  $\beta$ 2-AR.

98.86% Purity: Clinical Data: Launched

10 mM × 1 mL, 100 mg Size:

## Dexmedetomidine hydrochloride ((+)-Medetomidine

hydrochloride; (S)-Medetomidine hydrochloride)

Dexmedetomidine hydrochloride ((+)-Medetomidine hydrochloride) is a potent, selective and orally active agonist of  $\alpha$ 2-adrenoceptor, with a  $K_i$  of 1.08 nM. Dexmedetomidine hydrochloride shows 1620-fold selectivity against α1-adrenoceptor.

Purity: 99 39% Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## Diacetolol D7

Cat. No.: HY-100635S

Diacetolol D7 is a deuterium labeled Diacetolol. Diacetolol is the major metabolite of Acebutolol. Diacetolol is a  $\beta$ -adrenoceptor blocking and

anti-arrhythmic agent.

Cat. No.: HY-N6969

Cat. No.: HY-17034A

Purity: >98%

Clinical Data: No Development Reported

## Dicentrine

Dicentrine is a natural product isolated from the plant Lindera megaphylla with antihypertensive effect. Dicentrine is an  $\alpha$ ,-adrenoceptor antagonist which has effective against human hyperplastic prostates.

99.38% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# DL-Norepinephrine-d6 hydrochloride

Cat. No.: HY-N7142S

DL-Norepinephrine-d6 hydrochloride is the deuterium labeled DL-Norepinephrine hydrochloride.

>98% Purity:

Clinical Data: No Development Reported 2.5 mg, 10 mg, 25 mg

## Dopexamine hydrochloride

(FPL60278AR) Cat. No.: HY-U00205

Dopexamine hydrochloride is a β2 adrenergic receptor agonist.

>98% Clinical Data: Launched 1 mg, 5 mg

## Doxazosin

(UK 33274) Cat. No.: HY-B0098

Doxazosin (UK 33274) is a quinazoline-derivative that selectively antagonizes postsynaptic α1-adrenergic receptors.

Purity: >98% Clinical Data: Launched Size: 1 mg, 5 mg

## Doxazosin D8 (UK 33274 D8)

Cat. No.: HY-B0098S

Doxazosin D8 (UK 33274 D8) is a deuterium labeled Doxazosin (UK 33274). Doxazosin is a quinazoline-derivative that selectively antagonizes postsynaptic  $\alpha 1$  adrenergic receptors.

Purity: >98%

Clinical Data: No Development Reported

Size: 5 mg

## Doxazosin mesylate

(UK 33274 mesylate) Cat. No.: HY-B0098A

Doxazosin mesylate (UK 33274) is a quinazoline-derivative that selectively antagonizes postsynaptic α1-adrenergic receptors.

Purity: 99 72% Clinical Data: Launched

 $10 \text{ mM} \times 1 \text{ mL}, 500 \text{ mg}, 1 \text{ g}$ 

## Dronedarone

(SR 33589) Cat. No.: HY-A0016

Dronedarone (SR 33589), a derivative of amiodarone (HY-14187), is a class III antiarrhythmic agent for the study of atrial fibrillation (AF) and atrial flutter.

**Purity:** 99 81% Clinical Data: Launched

10 mM × 1 mL, 10 mg, 50 mg



# Dronedarone D6 hydrochloride

Cat. No.: HY-A0016S

Dronedarone D6 hydrochloride is the deuterium labeled Dronedarone. Dronedarone hydrochloride, a derivative of Amiodarone (HY-14187), is a class III antiarrhythmic agent for the study of atrial fibrillation (AF) and atrial flutter.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **Ecastolol**

Cat. No.: HY-101691

Ecastolol is a beta adrenergic receptor antagonist, with antianginal activities.

>98% Purity:

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## Efaroxan hydrochloride

Cat. No.: HY-B1416A

Efaroxan hydrochloride is a potent, selective and orally active α2-adrenoceptor antagonist, with antidiabetic activity. Efaroxan hydrochloride is a selective I1-Imidazoline receptor antagonist. Efaroxan hydrochloride can be used for the research of cardiovascular disease.

Purity:

Clinical Data: No Development Reported 5 mg, 10 mg, 50 mg, 100 mg Size:

## **Epanolol**

(Visacor; ICI141292) Cat. No.: HY-U00183

Epanolol (Visacor; ICI141292) is a potent **β-adrenoceptor** partial agonist with a greater affinity for  $\beta 1$ - than  $\beta 2$ -adrenoceptors.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Epanolol-d5

Cat. No.: HY-U00183S

Epanolol-d5 (Visacor-d5) is the deuterium labeled Epanolol. Epanolol (Visacor) is a potent **β-adrenoceptor** partial agonist with a greater affinity for  $\beta 1$ - than  $\beta 2$ -adrenoceptors.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Esmolol hydrochloride

Cat. No.: HY-B1392

Esmolol hydrochloride is a beta adrenergic receptor blocker.

99.34% Clinical Data: Launched

10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Esmolol-d7 hydrochloride

Cat. No.: HY-B1392S

Esmolol-d7 hydrochloride is the deuterium labeled Esmolol hydrochloride. Esmolol hydrochloride is a beta adrenergic receptor blocker.

**Purity:** > 98%

Clinical Data:

Size: 1 mg, 10 mg

## **Etilefrine**

F.11 C 1

(3-[2-(ethylamino)-1-hydroxyethyl]phenol) is an  $\alpha$  adrenergic agonist. Etilefrine also is an AMPK activator. Etilefrine can be used for the research of postural hypotension.

Cat. No.: HY-A0144

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

# Falintolol, (Z)-

Cat. No.: HY-U00283

Falintolol, (Z)-, a new  $\beta$ -adrenergic antagonist, is characterized by the presence of an oxime function

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Fenmetozole Tosylate

Cat. No.: HY-U00402

Fenmetozole Tosylate is an antagonist of the actions of ethanol, also antagonizes  $\alpha 2$ -adrenergic receptor, and acts as an antidepressant drug.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# O OH

## Fenoterol

(Th-1165; Phenoterol) Cat. No.: HY-B0976

Fenoterol (Th-1165), a sympathomimetic agent, is a selective and orally active **β2-adrenoceptor** agonist. Fenoterol is an effective bronchodilator and can be used for bronchospasm associated with asthma, bronchitis and other obstructive airway diseases research.

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

## Fenoterol hydrobromide

(Th-1165a; Phenoterol hydrobromide)

Fenoterol hydrobromide (Th-1165a), a sympathomimetic agent, is a selective and orally active  $\beta 2$ -adrenoceptor agonist.

Cat. No.: HY-B0976A

Purity: 99.71% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg

## Fenoterol-d6 hydrobromide

Cat. No.: HY-B0976AS

Fenoterol-d6 hydrobromide (Th-1165a-d6) is the deuterium labeled Fenoterol hydrobromide. Fenoterol hydrobromide (Th-1165a), a sympathomimetic agent, is a selective and orally active β2-adrenoceptor agonist.

HBr

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Fenspiride-d5 hydrochloride

Cat. No.: HY-A0027S

Fenspiride-d5 hydrochloride is the deuterium labeled Fenspiride hydrochloride. Fenspiride hydrochloride is an  $\alpha$  adrenergic and H1 histamine receptor antagonist.

Purity: >98% Clinical Data:

Size: 1 mg, 10 mg

## FFN270 hydrochloride

Cat. No.: HY-131007

FFN270 hydrochloride, a fluorescent tracer of norepinephrine, is a fluorescent substrate of the norepinephrine and vesicular monoamine transporters.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Fiduxosin

Cat. No.: HY-U00399

Fiduxosin is a potent  $\alpha 1$ -adrenoceptor antagonist, with  $K_i$  of 0.160 nM, 24.9 nM, and 0.920 nM for  $\alpha 1a$ -,  $\alpha 1b$ -, and  $\alpha 1d$ -adrenoceptors, respectively.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 5 mg

## G-Protein antagonist peptide

Cat. No.: HY-P1376

G-Protein antagonist peptide is the substance P-related peptide that inhibits binding of G proteins to their receptors. G-Protein antagonist peptide competitively and reversibly inhibits M2 muscarinic receptor activation of G, or G and inhibits G, activation by  $\beta$ -adrenoceptors.

{Glp}QWFWWM-NH2

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Glaucine

#### (O,O-Dimethylisoboldine; S-(+)-Glaucine; NSC 34396) Cat. No.: HY-N3945

Glaucine (O,O-Dimethylisoboldine) is an alkaloid isolated from Glaucium flavum Crantz with antitussive, bronchodilation and anti-inflammatory properties.

**Purity:** 

Clinical Data: No Development Reported

5 mg, 10 mg Size:

# Glaucine-d6 (O,O-Dimethylisoboldine-d6) is the

97 35%

Clinical Data: No Development Reported

1 mg, 5 mg, 10 mg

Glaucine-d6 (O,O-Dimethylisoboldine-d6; S-(+)-Glaucine-d6;

G-Protein antagonist peptide TFA

G-Protein antagonist peptide TFA is a truncated

substance P-related peptide, competes with

receptor for G protein binding.

Purity:

Size:

NSC 34396-d6)

deuterium labeled Glaucine. Glaucine (O,O-Dimethylisoboldine) is an alkaloid isolated from Glaucium flavum Crantz with antitussive, bronchodilation and anti-inflammatory properties.

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg



Cat. No.: HY-N3945S

Cat. No.: HY-P1376A

(GIp)QWFWWM-NH2 (TFA salt)

Gramine

#### (Donaxine) Cat. No.: HY-N0166

Gramine (Donaxine) is a natural alkaloid isolated from giant reed, acts as an active adiponectin receptor (AdipoR) agonist, with IC<sub>so</sub>s of 3.2 and 4.2 µM for AdipoR2 and AdipoR1, respectively. Gramine is also a human and mouse **B2-Adrenergic** receptor (β2-AR) agonist.



Purity: 99.63%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 50 ma

#### **Guanabenz Acetate**

## (BR-750; Wy8678 acetate)

Guanabenz (Acetate) (BR-750) is an alpha-2 selective adrenergic agonist used as an antihypertensive agent.



Cat. No.: HY-17416

Cat. No.: HY-B0566

98.39% Purity: Clinical Data: Launched

10 mM × 1 mL, 50 mg, 100 mg, 500 mg

## Guanfacine

## Cat. No.: HY-17416A

Guanfacine is a selective  $\alpha 2A$  receptor agonist. Target: α2A Receptor Guanfacine is a sympatholytic. It is a selective α2A receptor agonist.

>98% Purity: Clinical Data: Launched Size: 1 mg, 5 mg

## Guanfacine hydrochloride

Guanfacine hydrochloride, an anti-hypertensive agent, is a selective α2A-adrenoceptor agonist with Kd of 31 nM and displays 60-fold selectivity over α2B-adrenoceptors. IC50 Value: 31 nM(Kd) Target: Adrenergic Receptor Guanfacine is a

sympatholytic. Purity: 99.96%

Clinical Data: Launched

10 mM  $\times$  1 mL, 10 mg, 50 mg, 100 mg Size:

## Guanfacine-d2 hydrochloride

## Cat. No.: HY-17416S

Guanfacine-d2 hydrochloride is the deuterium labeled Guanfacine hydrochloride. Guanfacine hydrochloride, an anti-hypertensive agent, is a selective α2A-adrenoceptor agonist with Kd of 31 nM and displays 60-fold selectivity over α2B-adrenoceptors.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Guanoxabenz

## (Hydroxyguanabenz)

Guanoxabenz is an  $\alpha 2$  adrenergic receptor agonist, with a K, of 4000 nM and the fully activated form 40 nM for an α2A adrenoceptor.



Cat. No.: HY-U00123

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Guanoxabenz hydrochloride

(Hydroxyguanabenz hydrochloride)

Cat. No.: HY-U00123A

Guanoxabenz (Hydroxyguanabenz) hydrochloride is an  $\alpha 2$  adrenergic receptor agonist, with a  $K_i$  of 4000 nM and the fully activated form 40 nM for an  $\alpha 2A$  adrenoceptor.

**Purity:** 99.72%

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Harmane

Harmane, a  $\beta$ -Carboline alkaloid (BCA), is a potent neurotoxin that causes severe action tremors and psychiatric manifestations. Harmane shows 1000-fold selectivity for I1-Imidazoline receptor (IC $_{50}$ =30 nM) over  $\alpha$ 2-adrenoceptor (IC $_{50}$ =18  $\mu$ M).

Purity: 99.81%

Clinical Data: No Development Reported

Size: 100 mg



Cat. No.: HY-101392

## Harmane-d1

Cat. No.: HY-101392S

Harmane-d1 is the deuterium labeled Harmane. Harmane, a  $\beta$ -Carboline alkaloid (BCA), is a potent neurotoxin that causes severe action tremors and psychiatric manifestations.

Purity: 95.19%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

## Harmane-d2

Harmane-d2 is the deuterium labeled Harmane. Harmane, a  $\beta$ -Carboline alkaloid (BCA), is a potent neurotoxin that causes severe action tremors and psychiatric manifestations.

N D

Cat. No.: HY-101392S1

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **HEAT** hydrochloride

(BE2254 hydrochloride) Cat. No.: HY-100980

HEAT (BE2254) hydrochloride is a selective  $_{alpha\,1}$   $_{adrenergic\,\, receptor}$  antagonist. HEAT hydrochloride, a phenethylamine derivative, shows pK<sub>s</sub> of 9, 9.1, and 8.57 for alpha 1a, alpha 1b and alpha 1c, respectively.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Higenamine

## (Norcoclaurine)

Higenamine (Norcoclaurine), a β2-AR agonist, is a key component of the Chinese herb aconite root that prescribes for treating symptoms of heart failure in the oriental Asian countries. Higenamine (Norcoclaurine) has anti-apoptotic effects.

HONH

Cat. No.: HY-N2037

Purity: >98% Clinical Data: Phase 1

Size: 5 mg, 10 mg, 20 mg

## Higenamine hydrochloride

## (Norcoclaurine hydrochloride) Cat. No.: HY-N2037A

Higenamine hydrochloride (Norcoclaurine hydrochloride), a  $\beta$ 2-AR agonist, is a key component of the Chinese herb aconite root that prescribes for treating symptoms of heart failure in the oriental Asian countries.

Purity: 99.06%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 100 mg

## HOKU-81

## (4-Hydroxytulobuterol)

HOKU-81 (4-Hydroxytulobuterol) is one of the metabolites of Tulobuterol (HY-B1810). HOKU-81 is a potent and selective  $\beta$ 2-adrenoceptor stimulant. HOKU-81 has bronchodilating effect.

Cat. No.: HY-50291

**Purity:** ≥95.0%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 25 mg

## Hydrocortisone 17-butyrate

(Cortisol 17-butyrate; Hydrocortisone butyrate) Cat. No.: HY-B0983

Hydrocortisone 17-butyrate is an adrenocortico hormone.

Purity: 99.93% Clinical Data: Launched Size: 100 mg

## ICI 118,551 hydrochloride

## (ICI 118551 hydrochloride)

ICI 118,551 (hydrochloride) is a highly selective  $\beta 2$  adrenergic receptor antagonist, with  $K_s$ s of 0.7, 49.5 and 611 nM for  $\beta 2$ ,  $\beta 1$  and  $\beta 3$  receptors, respectively.



Cat. No.: HY-13951

**Purity:** 99.64%

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## ICI 89406

Cat. No.: HY-15726

ICI 89406 is a selective **β1 adrenergic receptor** antagonist amenable to labelling with positron emitters, for PET.

Purity: >98%

Clinical Data: No Development Reported Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Idazoxan hydrochloride

(RX 781094 hydrochloride)

Idazoxan hydrochloride (RX 781094 hydrochloride) is an  $\alpha_3$ -adrenoceptor antagonist and is also a imidazoline receptors (IRs) antagonist competitively antagonized the centrally induced hypotensive effect of imidazoline-like drugs

Purity: 98 21%

Clinical Data: No Development Reported 10 mM × 1 mL, 5 mg, 10 mg, 25 mg Size:

Cat. No.: HY-14561A

H-CI

## Idazoxan-d4 hydrochloride

(RX 781094-d4 hydrochloride)

Idazoxan-d4 (RX 781094-d4) hydrochloride is the deuterium labeled Idazoxan hydrochloride.

Cat. No.: HY-14561AS

Purity: >98%

Clinical Data: No Development Reported

1 mg, 10 mg

## **Imoxiterol**

(RP 58802B) Cat. No.: HY-101585

Imoxiterol (RP 58802B) is a β-adrenergic agonist.

Purity: 93.86%

Clinical Data: No Development Reported

## Indacaterol

Cat. No.: HY-14299

Indacaterol(Onbrez; Arcapta) is an ultra-long-acting  $\beta$ -adrenoceptor agonist. IC50 value: Target: β-adrenoceptor Indacaterol inhibits cAMP production in Chinese hamster ovary cells stably transfected with human β2 adrenoceptors with pEC50 of 8.06.

99.98% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg, 500 mg

## Indacaterol maleate (QAB149)

Cat. No.: HY-14299A

Indacaterol (QAB149) maleate is an ultra-long-acting  $\beta$ -adrenoceptor agonist.



99.92% Purity: Clinical Data: Launched

10 mM × 1 mL, 100 mg, 500 mg Size

## Indacaterol-d3

Cat. No.: HY-14299S

Indacaterol-d3 is deuterium labeled Indacaterol.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Indanidine

Cat. No.: HY-101717

Indanidine is an alpha-adrenergic agonist.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Indoramin

 $\alpha_{1A}$ -adrenoceptor.

(Indoramine; Wy 21901)

Indoramin is an orally active antihypertensive agent. Indoramin is also selective for the

Cat. No.: HY-12760

Purity: >98% Clinical Data: Launched

Size: 5 mg, 10 mg, 50 mg, 100 mg

## **Indoramin D5**

(Indoramine D5; Wy-21901 D5)

Cat. No.: HY-12760S

Indoramin D5 is deuterium labeled Indoramin, which is a piperidine antiadrenergic agent.

>98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Isamoltane hemifumarate

Isamoltane hemifumarate is a selective antagonist of 5-HT, receptor, with an IC, of 39 nM for inhibits the binding of [125I]ICYP to 5-HT<sub>1B</sub> recognition sites in rat brain membranes. Isamoltane hemifumarate is also a β-adrenoceptor ligand, with an  $IC_{50}$  of 8.4 nM.

Purity: >98%

Clinical Data: No Development Reported

Size: 5 mg

## Cat. No.: HY-19578B

# Isometheptene mucate

Cat. No.: HY-B1666B

Isometheptene mucate, a sympathomimetic agent, is a indirect-acting adrenergic receptor agonist. Isometheptene mucate can be used for migraine research.

Purity:

Clinical Data: No Development Reported

5 mg, 10 mg

## Isoprenaline hydrochloride (Isoproterenol hydrochloride)

(3-Hydroxy-4-methoxycinnamic acid)

is a cinnamic acid derivative that has

99 92%

Clinical Data: No Development Reported

nM) and increase glucose use.

antidiabetic activity. Isoferulic acid binds to and activates  $\alpha 1$ -adrenergic receptors (IC<sub>50</sub>=1.4  $\mu$ M)

to enhance secretion of  $\beta$ -endorphin (EC<sub>50</sub>=52.2

 $10 \text{ mM} \times 1 \text{ mL}, 100 \text{ mg}$ 

Isoferulic acid (3-Hydroxy-4-methoxycinnamic acid)

Isoferulic acid

Purity:

Size:

Isoprenaline hydrochloride is a non-selective **β-adrenergic receptor** agonist with potent peripheral vasodilator, bronchodilator, and cardiac stimulating activities.

HCI

Cat. No.: HY-B0468

Cat. No.: HY-N0761

**Purity:** 99 52% Clinical Data: Launched

10 mM × 1 mL, 200 mg, 1 g

## Isoxsuprine hydrochloride

Cat. No.: HY-B1270

Isoxsuprine hydrochloride is a beta-adrenergic receptor agonist with  $K_i$ s of 13.65  $\mu M$  and 3.48  $\mu M$ for myometrial and placental beta-adrenergic receptor, respectively. Isoxsuprine hydrochloride is also a NMDA receptor antagonist.

99.87% Purity:

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 200 mg

## Isoxsuprine-d6 hydrochloride

Cat. No.: HY-B1270S

Isoxsuprine-d6 hydrochloride is the deuterium labeled Isoxsuprine hydrochloride. Isoxsuprine hydrochloride is a beta-adrenergic receptor agonist with K<sub>s</sub> of 13.65 μM and 3.48 μM for myometrial and placental beta-adrenergic receptor, respectively.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Ivabradine hydrochloride

Cat. No.: HY-B0162A

Ivabradine hydrochloride is an orally bioavailable, hyperpolarization-activated, cyclic nucleotide-gated (HCN) channel blocker.

99.87% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg

## Ivabradine-d3 hydrochloride

Cat. No.: HY-B0162AS1

Ivabradine D3 Hydrochloride is the deuterium labeled Ivabradine hydrochloride. Ivabradine hydrochloride is a new I, inhibitor with IC<sub>50</sub> of 2.9 μM, and used as a pure heart rate lowering agent.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Ivabradine-d6 hydrochloride

Cat. No.: HY-B0162AS

Ivabradine D6 hydrochloride is the deuterium labeled Ivabradine hydrochloride. Ivabradine hydrochloride is a new I<sub>s</sub> inhibitor with IC<sub>so</sub> of 2.9  $\mu\text{M}\text{,}$  and used as a pure heart rate lowering agent.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## JP1302 dihydrochloride

Cat. No.: HY-103213

JP1302 dihydrochloride is a selective, high affinity antagonist of the alpha2C-adrenoceptor  $(\alpha_{2c}$ -adrenoceptor), with a  $K_b$  value (antagonist activity) of 16 nM and a K<sub>i</sub> (binding affinity) value of 28 nM.

Purity: 99.83%

Clinical Data: No Development Reported

10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Ko-3290

Cat. No.: HY-101721

Ko-3290 is an antagonist of  $\beta$ -adrenoceptor, with cardioselectivity and antilipolytic effects in animals

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## KUC-7322

KUC-7322, a selective β3 -adrenoceptor agonist, is the active form of ritobearon. Ritobearon decreases intravesical pressure with minimal effects on the cardiovascular system.

Cat. No.: HY-116169

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## KUL-7211 racemate

Cat. No.: HY-19673A

KUL-7211 racemate is the racemate of KUL-7211. KUL-7211 is a selective  $\beta$ -adrenoceptor agonist.

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## L-765314

Cat. No.: HY-101385

L-765314 is a potent and selective α1b adrenergic receptor antagonist with Kis of 5.4 nM and 2.0 nM for rat and human α1b adrenergic receptor, respectively.

Purity: 99 77%

Clinical Data: No Development Reported

10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## L-771688

Cat. No.: HY-U00237

L-771688 is a highly selective α1A-Adrenoceptor antagonist with a K<sub>i</sub> of 0.43±0.02 nM.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## L748337

Cat. No.: HY-103211

L748337 is a potent β3-adrenergic receptor antagonist and displays selectivity over  $\beta 1$  and  $\beta 2$  receptors. The K, values of L748337 for β3-, β2-

and β1-adrenoceptors are 4.0 nM, 204 nM and

390 nM, respectively. 98.02% Purity:

Clinical Data: No Development Reported

Size: 5 mg

## L755507

Cat. No.: HY-19334

L755507 is a potent, selective agonist of  $\beta_3$ -AR with an IC<sub>so</sub> of 35 nM. L755507 enhances the homology-directed repair (HDR)-mediated genome editing in CRISPR/Cas9 nickase system.

98.33% Purity:

Clinical Data: No Development Reported 10 mM × 1 mL, 5 mg Size:

## Labetalol

(AH5158; Sch-15719W free base)

Labetalol (AH5158) is an orally active selective  $\alpha 1$ - and non-selective  $\beta$ -adrenergic receptors competitive antagonist. Labetalol, an anti-hypertensive agent, can be used for the research of cardiovascular disease, such as hypertension in pregnancy.

Purity: 98.70%



Cat. No.: HY-121383

Clinical Data: Launched Size: 10 mg, 25 mg

## Labetalol hydrochloride

(AH-5158 hydrochloride; Sch-15719W) Cat. No.: HY-B1108

Labetalol hydrochloride is a mixed alpha/beta adrenergic antagonist that is used to treat high blood pressure.

Purity: 99.96% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg

## Landiolol hydrochloride

(ONO1101 hydrochloride)

Cat. No.: HY-100607A

Landiolol hydrochloride (ONO1101 hydrochloride) is a highly beta1 selective ultra-short acting beta-blocker (β1/β2 selectivity=255:1, a half-life of 4min) acts as an adrenoceptor antagonist.

Purity: 99.96% Clinical Data: Launched

10 mM × 1 mL, 5 mg, 10 mg

## Latrepirdine dihydrochloride

(Dimebolin dihydrochloride)

Cat. No.: HY-14537

Latrepirdine dihydrochloride is a neuroactive compound with antagonist activity at histaminergic,  $\alpha\text{-}adrenergic$ , and serotonergic receptors. Latrepirdine stimulates amyloid precursor protein (APP) catabolism and  $\text{amyloid-}\beta$  (A\beta) secretion.

HCI HCI

Purity: 99.75% Clinical Data: Launched

Size:

10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

### Levalbuterol

((R)-Albuterol; (R)-Salbutamol; Levosalbutamol)

Levalbuterol ((R)-Albuterol; (R)-Salbutamol) is a short-acting  $\beta$ 2-adrenergic receptor agonist and the active (R)-enantiomer of Salbutamol. Levalbuterol is a more potent bronchodilator than Salbutamol and has the potential for the treatment of COPD.</br>

HO HO N H

Cat. No.: HY-B1675

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

## Levalbuterol tartrate

(Levosalbutamol tartrate) Cat. No.: HY-17457

Levosalbutamol tartrate(levalbuterol) is the R-enantiomer of the short-acting  $\beta$ 2-adrenergic receptor agonist salbutamol. IC50 Value: Target:  $\beta$ 2-adrenergic receptor Levosalbutamol and salbutamol produced significantly better bronchodilator responses than placebo.

HO HO OH

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

## Levobetaxolol hydrochloride

((S)-Betaxolol hydrochloride; AL-1577A)

Levobetaxolol hydrochloride is a beta-adrenergic receptor inhibitor (beta blocker) that can lower the pressure in the eye. Levobetaxolol hydrochloride can be used for the research of glaucoma.

H-CI OH H

Cat. No.: HY-B0381B

Purity: 98.53% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Lidanserin

(ZK-33839) Cat. No.: HY-101815

Lidanserin (ZK-33839) acts as a  $\mathbf{5}\text{-HT}_{2A}$  and  $\alpha_1$ -adrenergic receptor antagonist.

- De-10

Purity: ≥98.0%

Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg

## Lidanserin-d6

(ZK-33839-d6) Cat. No.: HY-101815S

Lidanserin-d6 (ZK-33839-d6) is the deuterium labeled Lidanserin. Lidanserin (ZK-33839) acts as a 5-HT $_{\rm 2A}$  and  $\alpha_{\rm 1}$ -adrenergic receptor antagonist.



**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Lofexidine

Cat. No.: HY-B1052A

Lofexidine is a selective  $\alpha 2$ -receptor agonist, commonly used to alleviate the physical symptoms of heroin and other types of opioid withdrawal.

Purity: 99.08% Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg

## Lofexidine hydrochloride

(Baq-168; MDL-14042)

Lofexidine (hydrochloride) is a selective  $\alpha 2$ -receptor agonist, commonly used to alleviate the physical symptoms of heroin and other types of opioid withdrawal.



Cat. No.: HY-B1052

Purity: 99.94% Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg

# H-CI

## Lofexidine-d4 hydrochloride

Cat. No.: HY-B1052S

Lofexidine-d4 hydrochloride (Baq-168-d4) is the deuterium labeled Lofexidine hydrochloride. Lofexidine hydrochloride is a selective  $\alpha 2\text{-receptor}$  agonist, commonly used to alleviate the physical symptoms of heroin and other types of opioid withdrawal.

CI ON NHOL

Purity: >98% Clinical Data:

Size: 1 mg, 10 mg

## Lubabegron

(LY-488756)

Lubabegron is a potent modulator of  $\beta$ -adrenergic receptor ( $\beta$ -AR). Lubabegron demonstrates antagonistic behavior at the  $\beta_1$  and  $\beta_2$  receptor subtypes and agonistic behavior at the  $\beta_3$  receptor subtype in cattle. Lubabegron reduces NH $_3$  gas emissions from an animal or its waste.

CYON NAME OF THE PROPERTY OF T

Cat. No.: HY-123012

**Purity:** >98%

Clinical Data: No Development Reported

**Size:** 50 mg, 100 mg

## Lusaperidone

(R107474) Cat. No.: HY-U00117

Lusaperidone (R107474) is an  $\alpha$ 2 adrenergic receptor antagonist with Ks of 0.13 and 0.15 nM for  $\alpha$ 2A and  $\alpha$ 2C, respectively.

Purity: 97 74%

Clinical Data: No Development Reported Size: 5 mg, 10 mg, 20 mg

## LY377604

LY377604 is a human β<sub>2</sub>-adrenergic receptor agonist with an EC<sub>50</sub> of 2.4 nM and also a  $\beta_1$ and  $\beta_2$ -adrenergic receptor antagonist.

Cat. No.: HY-13713

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Mabuterol-D9

Cat. No.: HY-13338S

Mabuterol-D9 is a deuterium labeled Mabuterol. Mabuterol is an agonist of the  $\beta$ 2-adrenergic receptor.

**Purity:** >98%

Clinical Data: No Development Reported 1 mg, 5 mg, 10 mg

## Mapenterol hydrochloride

Cat. No.: HY-136435

Mapenterol hydrochloride is a type of **β2-adrenoceptor** agonist.

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Mapenterol-d6 hydrochloride

Cat. No.: HY-136435S1

Mapenterol-d6 hydrochloride is the deuterium labeled Mapenterol hydrochloride. Mapenterol hydrochloride is a type of  $\beta$ 2-adrenoceptor agonist.

Purity: >98%

Clinical Data: No Development Reported Size: 2.5 mg, 250 μg, 1 mg, 5 mg, 10 mg

## Mebeverine D6 Hydrochloride

Cat. No.: HY-A0078S

Mebeverine D6 Hydrochloride is the deuterium labeled Mebeverine, which is an antimuscarinic.

>98% Purity:

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## Medetomidine

Cat. No.: HY-17034

Medetomidine(Domtor) is a potent, highly selective α2-adrenoceptor agonist (Ki values are 1.08 and 1750 nM for  $\alpha 2\text{-}$  and  $\alpha 1\text{-}adrenoceptors$ respectively).

99.97% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## Medetomidine hydrochloride (MPV785)

Medetomidine hydrochloride is an agonist of adrenergic alpha-2 receptor, which is used in veterinary medicine for its analgesic properties.

Cat. No.: HY-17034B

99.88% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg

## Medetomidine-d3 hydrochloride

(MPV785-d3)

Cat. No.: HY-17034BS Medetomidine-d3 hydrochloride (MPV785-d3) is the

deuterium labeled Medetomidine hydrochloride. Medetomidine hydrochloride is an agonist of adrenergic alpha-2 receptor.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Meranzin

Meranzin is an absorbed bioactive compound from the Traditional Chinese Medicine (TCM) Chaihu-Shugan-San (CSS). Meranzin, isolated from leaves of Murraya exotica L., regulates the shared alpha 2-adrenoceptor and involves the AMPA-ERK1/2-BDNF signaling pathway.

>98%

Clinical Data: No Development Reported

1 mg, 5 mg



Cat. No.: HY-N3298

## Metaproterenol

(Orciprenaline) Cat. No.: HY-B1276A

Metaproterenol (Orciprenaline) is a direct-acting sympathomimetic and a β2-adrenergic receptor (β2AR) agonist with an  $IC_{50}$  of 68 nM. Metaproterenol also has anti-inflammatory activity.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Metaproterenol hemisulfate

(Orciprenaline hemisulfate)

Metaproterenol hemisulfate (Orciprenaline hemisulfate) is a direct-acting sympathomimetic and a  $\beta 2$ -adrenergic receptor ( $\beta 2AR$ ) agonist with an IC<sub>50</sub> of 68 nM. Metaproterenol hemisulfate also has anti-inflammatory activity.

Cat. No.: HY-B1276

Purity: 99.86% Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg, 100 mg

## Metaproterenol-d7 hemisulfate

Cat. No.: HY-B1276S

Metaproterenol-d7 (Orciprenaline-d7) hemisulfate is the deuterium labeled Metaproterenol hemisulfate. Metaproterenol hemisulfate (Orciprenaline hemisulfate) is a direct-acting sympathomimetic and a \( \beta^2\)-adrenergic receptor (\( \beta^2 AR \)) agonist with an IC<sub>50</sub> of 68 nM.

>98% Purity:

Clinical Data: No Development Reported

1 mg, 10 mg

## Metazosin

(Kenosin) Cat. No.: HY-123563

Metazosin (Kenosin) is a potent α1 adrenoceptor blocker. Metazosin is an antihypertensive agent lowering blood pressure.

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Methyldopa

Purity:

Size:

(L-(-)-α-Methyldopa; MK-351) Cat. No.: HY-B0225

Methyldopa (L-(-)- $\alpha$ -Methyldopa), a potent antihyoertensive agent, is an alpha-adrenergic agonist (selective for  $\alpha 2$ -adrenergic receptors). Methyldopa is a prodrug and is metabolized (α-Methylepinephrine) in the central nervous system.

## Methyldopa hydrate

(L-(-)-α-Methyldopa hydrate; MK-351 hydrate) Cat. No.: HY-B0225B

Methyldopa hydrate (L-(-)-α-Methyldopa hydrate), a potent antihyoertensive agent, is an alpha-adrenergic agonist (selective for α2-adrenergic receptors). Methyldopa hydrate is a prodrug and is metabolized (α-Methylepinephrine) in the central nervous system.

1.5H<sub>2</sub>O

≥98.0% **Purity:** Clinical Data: Launched

Size: 10 mM × 1 mL, 500 mg, 1 g

# Methyldopa hydrochloride

Clinical Data: Launched

>98%

500 ma

(L-(-)-α-Methyldopa hydrochloride; MK-351 hydrochloride) Cat. No.: HY-B0225A

Methyldopa hydrochloride (L-(-)-α-Methyldopa hydrochloride) hydrochloride, a potent antihyoertensive agent, is an alpha-adrenergic agonist (selective for α2-adrenergic receptors).

>98% Purity: Clinical Data: Launched Size: 500 ma

## Methyldopa-d3 hydrochloride (L-(-)-α-Methyldopa-d3

hydrochloride; MK-351-d3 hydrochloride) Cat. No.: HY-B0225AS

Methyldopa-d3 (hydrochloride) is deuterium labeled Methyldopa (hydrochloride). Methyldopa hydrochloride (L-(-)-α-Methyldopa hydrochloride) hydrochloride, a potent antihyoertensive agent, is an alpha-adrenergic agonist (selective for α2-adrenergic receptors).

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Methyldopate hydrochloride

Cat. No.: HY-B1696A

Methyldopate hydrochloride is an ethyl ester hydrochloride prodrug of  $\alpha$ -Methyldopa ( $\alpha$ -MD; HY-B0225). Methyldopa (L-(-)-α-Methyldopa) is an  $\alpha$ -adrenergic agonist (selective for  $\alpha$ 2-adrenergic receptors). Methyldopate hydrochloride has the potential for severe hypertension research.

Purity: >98% Clinical Data: Launched Size: 25 mg, 50 mg

## Metipranolol

Cat. No.: HY-121567

Metipranolol is a nonselective and orally active **β-adrenergic receptor** antagonist. Metipranolol can be used for hypertension and glaucoma research.

Purity: 98.36%

Clinical Data: No Development Reported 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Metipranolol hydrochloride

Cat. No.: HY-16316

Metipranolol hydrochloride is a non-selective  $\beta$ adrenergic receptor blocking agent.

Purity: 99 92% Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Metoprolol

Metoprolol (Toprol) is a selective β1 receptor blocker used in treatment of several diseases of the cardiovascular system, especially hypertension. IC50 value: Target: β1 receptor.

Cat. No.: HY-17503

Purity: 99 89% Clinical Data: Launched

25 mg, 50 mg, 100 mg

## **Metoprolol Succinate**

Cat. No.: HY-17503A

Metoprolol Succinate (Toprol XL) is a selective β1 receptor blocker used in treatment of several diseases of the cardiovascular system, especially hypertension. IC50 value: Target: β1 receptor.

Purity: 99 54% Clinical Data: Launched

10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg

## **Metoprolol Tartrate**

Metoprolol is a cardioselective β1-adrenergic blocking agent. Target: β1- adrenergic Receptor Patients took 50 mg metoprolol twice daily with

weekly titration to response or 200 mg twice daily.

**Purity:** >98% Clinical Data: Launched 1 mg, 5 mg

Cat. No.: HY-17503B

Metoprolol-d6 tartrate

Cat. No.: HY-17503BS

Metoprolol-d6 (tartrate) is the deuterium labeled Metoprolol (Tartrate). Metoprolol is a cardioselective \( \beta 1-\) adrenergic blocking agent.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Metoprolol-d7

Cat. No.: HY-17503S

Metoprolol-d7 is the deuterium labeled Metoprolol. Metoprolol (Toprol) is a selective β1 receptor blocker used in treatment of several diseases of the cardiovascular system, especially hypertension.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Metoprolol-d7 hydrochloride

Cat. No.: HY-17503AS

Metoprolol-d7 hydrochloride is the deuterium labeled Metoprolol (Succinate). Metoprolol Succinate (Toprol XL) is a selective β1 receptor blocker used in treatment of several diseases of the cardiovascular system, especially hypertension.

Purity: >98%

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg

## MG<sub>1</sub>

Cat. No.: HY-U00110

MG 1 is an  $\alpha 1$  adrenergic receptor antagonist.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Midaglizole hydrochloride

((±)-DG5128; DG5128)

Cat. No.: HY-U00165

Midaglizole hydrochloride (DG5128) is a preferential α2-adrenoceptor antagonist. Midaglizole hydrochloride (DG5128) exhibits 7.4 times higher affinity (pK<sub>i</sub>=6.28) toward  $\alpha$ 2-adrenoceptor than  $\alpha$ 1-adrenoceptor.

2 HCI

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Mirabegron (YM178)

Mirabegron is a selective  $\beta_3$ -adrenoceptor agonist with EC<sub>50</sub> of 22.4 nM.

O NH2

Cat. No.: HY-14773

99.79% Clinical Data: Launched

10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Mirtazapine

(Org3770; 6-Azamianserin)

Cat. No.: HY-B0352

Mirtazapine (Org3770) is a potent and orally active noradrenergic and specific serotonergic antidepressant (NaSSA) agent. Mirtazapine is also a 5-HT<sub>2</sub>, 5-HT<sub>2</sub>, histamine H1 receptor and α2-adrenoceptor antagonist with pK, values of 8.05, 8.1, 9.3 and 6.95, respectively.

Purity: 99 97% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg, 200 mg, 500 mg

>98% Purity:

Mirtazapine-d4

(Org3770-d4; 6-Azamianserin-d4)

antidepressant (NaSSA) agent.

Mirtazapine-d4 is deuterium labeled Mirtazapine.

Mirtazapine (Org3770) is a potent and orally

active noradrenergic and specific serotonergic

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

Cat. No.: HY-B0352S2

## Moxisylyte hydrochloride

(Thymoxamine hydrochloride)

Moxisylyte (hydrochloride) is (alpha 1-blocker) antagonist, it can vasodilates cerebral vessels without reducing blood pressure. It is also used locally in the eye to reverse the mydriasis caused by phenylephrine and other sympathomimetic agents.

Cat. No.: HY-B1435

**Purity:** 99 96% Clinical Data: Launched

10 mM × 1 mL, 100 mg, 1 g Size:

## N-5984

(KRP-204)

N-5984 (KRP-204) is a potent and selective agonist of β3-adrenergic receptor. N-5984 has the potential for developing as one of the clinically effective drugs for obesity and diabetes mellitus.

Cat. No.: HY-117378

**Purity:** >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Nadolol

(SQ-11725) Cat. No.: HY-B0804

Nadolol (SQ-11725) is a non-selective and orally active  $\beta\text{-adrenergic}$  receptors blocker and is a substrate of organic anion transporting polypeptide 1A2 (OATP1A2). Nadolol has the the potential for high blood pressure, angina pectoris and vascular headaches research.

Cat. No.: HY-B0391

Purity: 99 97% Clinical Data: Launched

Size: 100 mg, 250 mg, 500 mg

## Nadolol-d9

(SQ-11725-d9)

Nadolol D9 (SQ-11725 D9) is the deuterium labeled Nadolol. Nadolol is a non-selective and orally active **B-adrenergic receptors** blocker.

DD D

Cat. No.: HY-B0804S

>98% Purity:

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## Naftopidil dihydrochloride

(KT-611 dihydrochloride; BM-15275 dihydrochloride)

Cat. No.: HY-B0391A Naftopidil dihydrochloride (KT-611

dihydrochloride) is a selective alpha1-adrenoceptor antagonist, with Ks of 3.7 nM, 20 nM and 1.2 nM for the cloned human  $\alpha_{\text{1a}}\text{--},\,\alpha_{\text{1b}}\text{--}$  and  $\alpha_{\text{1d}}$ -adrenoceptor subtypes, respectively.

Purity: >98% Clinical Data: Launched Size: 1 mg, 5 mg

## Naftopidil

(KT-611; BM-15275)

Naftopidil (KT-611) is is a selective alpha1-adrenoceptor antagonist, with K<sub>s</sub> of 3.7 nM, 20 nM and 1.2 nM for the cloned human  $\alpha_{1a}^-$ ,  $\alpha_{1b}^$ and  $\alpha_{1d}$ -adrenoceptor subtypes, respectively. Naftopidil has antiproliferative effects.

98.97% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g, 10 g

## Naftopidil hydrochloride

(KT-611 hydrochloride; BM-15275 hydrochloride)

Naftopidil hydrochloride (KT-611 hydrochloride) is a selective alpha1-adrenoceptor antagonist, with K<sub>i</sub>s of 3.7 nM, 20 nM and 1.2 nM for the cloned human  $\alpha_{1a}$ -,  $\alpha_{1b}$ - and  $\alpha_{1d}$ -adrenoceptor subtypes, respectively. Naftopidil hydrochloride has antiproliferative effects.

Purity: >98% Clinical Data: Phase 4 Size: 1 mg, 5 mg Cat. No.: HY-B0391B

(KT-611-d3; BM-15275-d3)

Naftopidil-d3

Naftopidil-d3 (KT-611-d3) is the deuterium labeled Naftopidil. Naftopidil (KT-611) is is a selective alpha1-adrenoceptor antagonist, with Ks of 3.7 nM, 20 nM and 1.2 nM for the cloned human  $\alpha_{1a}^{-}$ ,  $\alpha_{1b}^{-}$ and  $\alpha_{1d}$ -adrenoceptor subtypes, respectively.

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

Cat. No.: HY-B0391S

## Naftopidil-d5

(KT-611-d5; BM-15275-d5) Cat. No.: HY-B0391S1

Naftopidil-d5 is deuterium labeled Naftopidil. Naftopidil (KT-611) is is a selective alpha1-adrenoceptor antagonist, with Kis of 3.7 nM, 20 nM and 1.2 nM for the cloned human  $\alpha$ 1a-,  $\alpha$ 1b- and  $\alpha$ 1d-adrenoceptor subtypes, respectively.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Naminterol

Naminterol is a phenethanolamine derivative, is a  $oldsymbol{eta}_2$  adrenoceptor agonist with bronchodilatory properties. Naminterol is used for treatment of asthma.

NH2 NH OH

Cat. No.: HY-101822

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Naphazoline hydrochloride

Cat. No.: HY-B0446

Naphazoline hydrochloride is an ocular vasoconstrictor and imidazoline derivative sympathomimetic amine. Target: Adrenergic Receptor Naphazoline hydrochloride is the common name for 2-(1-naphthylmethyl)-2-imidazoline hydrochloride.



HCI

Purity: 98.56%
Clinical Data: Launched

Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g, 10 g

## Navafenterol

(AZD-8871; LAS191351)

Navafenterol (AZD-8871) is an inhaled dual-acting, potent, selective, and long-lasting M3-antagonist/β2-agonist (MABA) with long-lasting effects and favorable safety profile.



Cat. No.: HY-120802

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

#### Navafenterol saccharinate

(AZD-8871 saccharinate; LAS191351 saccharinate) Cat. No.: HY-120802A

Navafenterol (AZD-8871) saccharinate is an inhaled dual-acting, potent, selective, and long-lasting M3-antagonist/ $\beta$ 2-agonist (MABA) with long-lasting effects and favorable safety profile.



Purity: >98%

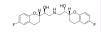
Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# Nebivolol

(R 065824) Cat. No.: HY-B0203

Nebivolol selectively inhibits  $\beta1$ - adrenergic receptor with IC50 of 0.8 nM. Target:  $\beta1$ - adrenergic receptor Nebivolol reduces cell proliferation of human coronary smooth muscle cells (haCSMCs) and endothelial cells (haECs) in a concentration- and time-dependent maner.



Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

## Nebivolol hydrochloride

(R 065824 hydrochloride) Cat. No.: HY-B0203A

Nebivolol hydrochloride selectively inhibits  $\beta$ 1-adrenergic receptor with IC50 of 0.8 nM. Target:  $\beta$ 1- adrenergic receptor Nebivolol reduces cell proliferation of human coronary smooth muscle cells (haCSMCs) and endothelial cells (haECs) in a concentration- and time-dependent maner.

Purity: 99.82% Clinical Data: Launched

Size:  $10 \text{ mM} \times 1 \text{ mL}, 10 \text{ mg}, 50 \text{ mg}, 100 \text{ mg}, 500 \text{ mg}$ 

## Nefazodone hydrochloride

(BMY-13754; MJ-13754-1)

Nefazodone hydrochloride (BMY-13754) is a potent and selective <code>5HT2A</code> ( $K_i$ =5.8 nM) antagonist with moderate inhibition of 5-HT and noradrenaline uptake ( $IC_{50}$  of 290 and 300 nM, respectively).



Cat. No.: HY-B1396

Purity: 99.02% Clinical Data: Launched

Size:  $10 \text{ mM} \times 1 \text{ mL}, 10 \text{ mg}, 50 \text{ mg}$ 

# Nefazodone-d6 dihydrochloride (BMY-13754-d6 dihydrochloride;

MJ-13754-1-d6 dihydrochloride) Cat. No.: HY-B1396S1

Nefazodone-d6 (dihydrochloride) is deuterium labeled Nefazodone (hydrochloride).



**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Nefazodone-d6 hydrochloride

(BMY-13754-d6; MJ-13754-1-d6)

Nefazodone-d6 hydrochloride (BMY-13754-d6) is the deuterium labeled Nefazodone hydrochloride.



Cat. No.: HY-B1396S

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Neldazosin

Cat. No.: HY-106416

Neldazosin is a potent **alpha1-adrenoceptor** antagonist.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Nicergoline

Nicergoline, an ergoline derivative ester of bromonicotinic acid, is a potent, selective and orally active antagonist of  $\alpha_{1A}$ -adrenoceptor. Nicergoline has vasodilator effects. Nicergoline also has ameliorative effects on cognitive function in mouse models of Alzheimer's disease.

Purity: 99.62% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg



Cat. No.: HY-B0702

## Nicergoline-13C,d3

Cat. No.: HY-B0702S

Nicergoline-13C,d3 is the 13C- and deuterium labeled. Nicergoline, an ergoline derivative ester of bromonicotinic acid, is a potent, selective and orally active antagonist of  $\alpha$ 1A-adrenoceptor. Nicergoline has vasodilator effects.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Norepinephrine

(Levarterenol; L-Noradrenaline)

Norepinephrine (Levarterenol; L-Noradrenaline) is a potent **adrenergic receptor (AR)** agonist. Norepinephrine activates  $\alpha_{1}$ ,  $\alpha_{2}$ ,  $\beta_{1}$  receptors.

HO NH<sub>2</sub>

Cat. No.: HY-13715

Purity: 98.08%
Clinical Data: Launched
Size: 500 mg

## Norepinephrine bitartrate monohydrate (Levarterenol

bitartrate monohydrate; ...) Cat. No.: HY-13715B

Norepinephrine (Levarterenol; L-Noradrenaline) bitartrate monohydrate is a potent **adrenergic receptor** (**AR**) agonist. Norepinephrine activates  $\alpha_i$ ,  $\alpha_{yz}$ ,  $\beta_1$  receptors.

HO OH OH H<sub>2</sub>O

Purity: 99.75%
Clinical Data: Launched
Size: 500 mg, 1 g, 5 g

## Norepinephrine hydrochloride (Levarterenol hydrochloride;

L-Noradrenaline hydrochloride)

Norepinephrine (Levarterenol; L-Noradrenaline)

hydrochloride is a potent adrenergic receptor (AR) agonist. Norepinephrine activates  $\alpha_{1'}$   $\alpha_{2'}$   $\beta_1$  receptors.

HO NH<sub>2</sub>

HCI

Cat. No.: HY-13715A

Purity: 99.95% Clinical Data: Launched Size: 500 mg

## Norepinephrine tartrate

(Levarterenol tartrate; L-Noradrenaline tartrate) Cat. No.: HY-13715C

Norepinephrine (Levarterenol; L-Noradrenaline) tartrate is a potent **adrenergic receptor (AR)** agonist. Norepinephrine tartrate activates  $\alpha_1$ ,  $\alpha_2$ ,  $\beta$ , receptors.

HO OH O

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 25 mg

## NRA-0160

NRA-0160 is a selective dopamine D4 receptor antagonist, with a  $\mathbf{K}_i$  value of 0.48 nM and with negligible affinity for dopamine D2 receptor ( $\mathbf{K}_i$ : >10000 nM), D3 receptor ( $\mathbf{K}_i$ : 39 nM), rat 5-HT2A receptor ( $\mathbf{K}_i$ : 180 nM) and rat  $\alpha$ 1

adrenoceptor (K<sub>i</sub>: 237 nM).

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# N S NF

Cat. No.: HY-101641

## O-Desmethyl Mebeverine alcohol

(Mebeverine metabolite O-desmethyl Mebeverine alcohol) Cat. No.: HY-G0008

O-Desmethyl Mebeverine alcohol is a metabolite of Mebeverine, which is a potent  $\alpha 1$  repector inhibitor, causing relaxation of the gastrointestinal tract.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# O-Desmethyl Mebeverine alcohol hydrochloride (Mebeverine metabolite O-desmethyl Mebeverine alcohol hydrochloride) Cat. No.: HY-G000

metabolite O-desmethyl Mebeverine alcohol hydrochloride) Cat. No.: HY-G0008A

O-Desmethyl Mebeverine alcohol hydrochloride is a metabolite of Mebeverine, which is a potent  $\alpha \mathbf{1}$  repector inhibitor, causing relaxation of the gastrointestinal tract.

**Purity:** ≥98.0%

Clinical Data: No Development Reported Size: 2 mg, 5 mg, 10 mg, 50 mg

## Octopamine hydrochloride

((±)-p-Octopamine hydrochloride)

Octopamine ((±)-p-Octopamine) hydrochloride, a biogenic monoamine structurally related to noradrenaline, acts as a neurohormone, a neuromodulator and a neurotransmitter in invertebrates

Cat. No.: HY-B0528A

Purity: 99 28%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g

## Octopamine-d4 hydrochloride

((±)-p-Octopamine-d4 hydrochloride)

Octopamine-d4 ((±)-p-Octopamine-d4) hydrochloride is the deuterium labeled Octopamine hydrochloride.

Cat. No.: HY-B0528AS

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Olodaterol

(BI1744) Cat. No.: HY-14301

Olodaterol (BI1744) is a selective, long acting  $\beta_2$ -adrenoceptor ( $\beta_2$ -AR) agonist (EC<sub>50</sub>=0.1 nM and  $pK_i = 9.14$  for human  $\beta_2$ -adrenoceptor, respectively). Olodaterol can be used for chronic obstructive pulmonary disease (COPD) and pulmonary fibrosis

Purity: 98 48% Clinical Data: Launched

2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Olodaterol hydrochloride

(BI1744 hydrochloride)

Olodaterol (BI1744) hydrochloride is a selective, long acting  $\beta_2$ -adrenoceptor ( $\beta_2$ -AR) agonist  $(EC_{50}=0.1 \text{ nM} \text{ and } pK_i=9.14 \text{ for human})$  $\beta_2$ -adrenoceptor, respectively). Olodaterol can be used for chronic obstructive pulmonary disease (COPD) and pulmonary fibrosis.



Cat. No.: HY-14301A

**Purity:** Clinical Data: Launched

5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## OPC-28326

Cat. No.: HY-101610

OPC-28326 is a selective peripheral vasodilator and an angatonist of  $\alpha 2$ -adrenergic receptor, with K, of 2040, 285, and 55nM for  $\alpha$ 2A-,  $\alpha$ 2B- and α2C-adrenoceptors, respectively.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Oxprenolol hydrochloride

(Ba 39089)

Oxprenolol hydrochloride (Ba 39089) is an orally bioavailable  $\beta$ -adrenergic receptor ( $\beta$ -AR) antagonist with a K, of 7.10 nM in a radioligand binding assay using rat heart muscle.

Cat. No.: HY-B1486

Purity: 99.86% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg

## Oxprenolol-d7

Cat. No.: HY-B1486AS

Oxprenolol-d7 is the deuterium labeled Oxprenolol. Oxprenolol (Ba 39089 free base) is an orally bioavailable β-adrenergic receptor (β-AR) antagonist with a K, of 7.10 nM in a radioligand binding assay using rat heart muscle.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Oxprenolol-d7 hydrochloride

(Ba 39089-d7)

Oxprenolol-d7 hydrochloride (Ba 39089-d7) is the deuterium labeled Oxprenolol hydrochloride. Oxprenolol hydrochloride (Ba 39089) is an orally bioavailable  $\beta$ -adrenergic receptor ( $\beta$ -AR) antagonist with a K, of 7.10 nM in a radioligand binding assay using rat heart muscle.

Cat. No.: HY-B1486S

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Paliperidone

(9-Hydroxyrisperidone) Cat. No.: HY-A0019

Paliperidone (9-Hydroxyrisperidone), the major active metabolite of Risperidone, is a dopamine D2 antagonist and 5-HT2A antagonist. Paliperidone is also active as an antagonist at  $\alpha 1$  and  $\alpha 2$  adrenergic receptors and H1-histaminergic receptors.

99.87% Purity: Clinical Data: Launched

Size 10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg

## Paliperidone-d4

Cat. No.: HY-A0019S

Paliperidone-d4 is the deuterium labeled Paliperidone. Paliperidone (9-Hydroxyrisperidone), the major active metabolite of Risperidone, is a dopamine D2 antagonist and 5-HT2A antagonist.

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## **Pamatolol**

Cat. No.: HY-U00019

Pamatolol is a cardioselective **beta-adrenoceptor** antagonist without sympathomimetic activity.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Pardoprunox

(SLV-308; DU-126891)

Pardoprunox (SLV-308) is a partial **dopamine D2** and **D3 receptor** partial agonist and a **serotonin 5-HT1A receptor** agonist, with  $pEC_{so}$ s of 8, 9.2, and 6.3, respectively.

Purity: >98% Clinical Data: Phase 3 Size: 1 mg, 5 mg

# N O O

Cat. No.: HY-14958

## Pardoprunox hydrochloride

(SLV-308 hydrochloride; DU-126891 hydrochloride)

Pardoprunox (SLV-308) hydrochloride is a partial dopamine D2 and D3 receptor partial agonist and a serotonin 5-HT1A receptor agonist, with pEC<sub>s,0</sub>S of 8, 9.2, and 6.3, respectively.

Cat. No.: HY-14958A

Purity: 98.24% Clinical Data: Phase 3

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Pargolol hydrochloride

(Ko 1400 hydrochloride)

Pargolol hydrochloride is a  $\boldsymbol{\beta}$  adrenergic receptor antagonist.

YN OH OH

H-CI

Cat. No.: HY-101658

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Paroxetine

Cat. No.: HY-122272

Paroxetine, a phenylpiperidine derivative, is a potent and selective **serotonin** reuptake inhibitor (SSRI). Paroxetine is a very weak inhibitor of norepinephrine (NE) uptake but it is still more potent at this site than the other SSRIs.

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

#### Penbutolol sulfate

((-)-Terbuclomine)

Penbutolol sulfate is able to bind to both beta-1 adrenergic receptors and beta-2 adrenergic receptors (the two subtypes), thus making it a non-selective  $\beta$  blocker. Penbutolol is a sympathomimetic drugused in the treatment of high blood pressure.

Purity: 99.46% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg



Cat. No.: HY-B1154

## Perphenazine

Cat. No.: HY-A0077

Perphenazine is a typical antipsychotic drug, inhibits 5-HT<sub>2A</sub>receptor, Alpha-1A adrenergic receptor, Dopamine receptor D2/D3, D2L receptor, and Histamine H1 receptor, with K<sub>1</sub> values of 5.6, 10, 0.765/0.13, 3.4, and 8 nM, respectively.

Purity: 99.72%
Clinical Data: Launched

Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g

## Perphenazine D8 Dihydrochloride

Cat. No.: HY-A0077AS

Perphenazine D8 Dihydrochloride is the deuterium labeled Perphenazine, which is a typical antipsychotic drug(5-HT, Dopamine receptor ligand).



**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Phenoxybenzamine (benzyl-2,3,4,5,6-d5) (hydrochloride)

Cat. No.: HY-B0431AS1

Phenoxybenzamine (benzyl-2,3,4,5,6-d5) hydrochloride is the deuterium labeled Phenoxybenzamine hydrochloride.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## PF-610355

Cat. No.: HY-14296

PF-610355 is a long-acting inhaled  $\beta_2\text{-}adrenoreceptor$  agonist, with an  $EC_{50}$  of 0.26 nM. PF-610355 has the potential for the study of asthma and COPD.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Phenoxybenzamine hydrochloride

Phenoxybenzamine hydrochloride is a selective antagonist of both  $\alpha$ -adrenoceptor and calmodulin that is commonly used for the treatment of hypertension, specifically caused by pheochromocytoma.

HCI

Cat. No.: HY-B0431A

Purity: >98.0% Clinical Data: Launched

Size: 10 mM × 1 mL, 200 mg, 500 mg, 1 g

## Phenoxybenzamine-d5 hydrochloride

Phenoxybenzamine-d5 hydrochloride is the deuterium

labeled Phenoxybenzamine hydrochloride.

Cat. No.: HY-B0431AS

>98% **Purity:** 

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Phentolamine mesylate

(Phentolamine methanesulfonate)

Phentolamine mesylate (Phentolamine methanesulfonate) is a reversible, non-selective, and orally active blocker of  $\alpha 1$  and  $\alpha 2$ adrenergic receptor that expands blood vessels to reduce peripheral vascular resistance.

Cat. No.: HY-B0362A

**Purity:** 99 90% Clinical Data: Launched

10 mM × 1 mL, 100 mg, 500 mg

## Phentolamine-d4 hydrochloride

Cat. No.: HY-12717AS

Phentolamine-d4 (Phentolamine-d4) hydrochloride is the deuterium labeled Phentolamine hydrochloride.

Purity: >98% Clinical Data

1 mg, 5 mg

## Phenylephrine

((R)-(-)-Phenylephrine; L-Phenylephrine)

Cat. No.: HY-B0769

(R)-(-)-Phenylephrine is a selective  $\alpha_1$ -adrenoceptor agonist primarily used as a decongestant.

Purity: 99 52% Clinical Data: Launched

10 mM × 1 mL, 500 mg Size:

## Phenylephrine hydrochloride ((R)-(-)-Phenylephrine

hydrochloride; L-Phenylephrine hydrochloride)

(R)-(-)-Phenylephrine hydrochloride is a selective  $\alpha_1$ -adrenoceptor agonist with pK<sub>i</sub>s of 5.86, 4.87 and 4.70 for  $\alpha_{\text{\tiny 1D'}}$   $\alpha_{\text{\tiny 1B}}$  and  $\alpha_{\text{\tiny 1A}}$  receptors respectively.

HCI

Cat. No.: HY-B0471

**Purity:** 99.95% Clinical Data: Launched

Size 10 mM × 1 mL, 100 mg, 500 mg

## Phenylephrine-2,4,6-d3 hydrochloride

((R)-(-)-Phenylephrine-2,4,6-d3 hydrochloride; ...)

Phenylephrine-2,4,6-d3 ((R)-(-)-Phenylephrine-2,4,6-d3) hydrochloride is the deuterium labeled Phenylephrine hydrochloride.

ŌН H-CI

Cat. No.: HY-B0471S1

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Phenylephrine-d3 hydrochloride ((R)-(-)-Phenylephrine-d3

hydrochloride; L-Phenylephrine-d3 hydrochloride) Cat. No.: HY-B0471S

Phenylephrine-d3 (R)-(-)-Phenylephrine-d3) hydrochloride is the deuterium labeled Phenylephrine hydrochloride. (R)-(-)-Phenylephrine hydrochloride is a selective  $\alpha_1$ -adrenoceptor agonist with **pK** s of 5.86, 4.87 and 4.70 for  $\alpha_{10}$ 

 $\alpha_{1B}$  and  $\alpha_{1A}$  receptors respectively.

Purity: >98%

Clinical Data: No Development Reported

Size:

## Phenylephrine-d6 hydrochloride ((R)-(-)-Phenylephrine-d6

hydrochloride; L-Phenylephrine-d6 hydrochloride) Cat. No.: HY-B0471S3

Phenylephrine-d6 (hydrochloride) is deuterium labeled Phenylephrine (hydrochloride). (R)-(-)-Phenylephrine hydrochloride is a selective α1-adrenoceptor agonist with pKis of 5.86, 4.87 and 4.70 for  $\alpha 1D,\,\alpha 1B$  and  $\alpha 1A$  receptors respectively.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Phenylethanolamine A

Cat. No.: HY-131103

Phenylethanolamine A acts as a β-adrenergic agonist. Phenylethanolamine A is a byproduct during the Ractopamine synthesis process.

OH # 100

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Phenylethanolamine A-D3

Cat. No.: HY-131103S

Phenylethanolamine A-D3 is a deuterium labeled Phenylethanolamine A. Phenylethanolamine A acts as a  $\beta$ -adrenergic agonist. Phenylethanolamine A is a byproduct during the Ractopamine synthesis process.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## (R6238)

Pimozide

Pimozide is a dopamine receptor antagonist,

Pimozide is a dopamine receptor antagonist, with K<sub>i</sub>s of 1.4 nM, 2.5 nM and 588 nM for dopamine D2, D3 and D1 receptors, respectively, and also has affinity at  $\alpha$ 1-adrenoceptor, with a K<sub>1</sub> of 39 nM; Pimozide also inhibits STAT3 and STAT5.

N C F

Cat. No.: HY-12987

Purity: 99.88% Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg

## Pimozide-d4

(R6238-d4) Cat. No.: HY-12987S

Pimozide D4 (R6238 D4) is a deuterium labeled Pimozide

Purity: >98%
Clinical Data: Phase 4
Size: 1 mg, 5 mg

## Pimozide-d5 N-Oxide

Cat. No.: HY-12987S1

Pimozide-d5 N-Oxide is the deuterium labeled

Pimozide.



**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Pindolol

(LB-46) Cat. No.: HY-B0982

Pindolol (LB-46) is a nonselective  $\beta$ -blocker with partial beta-adrenergic receptor agonist activity, also functions as a 5-HT1A receptor weak partial antagonist (Ki=33nM).

Purity: 99.91% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg

## Pindolol-d7

Cat. No.: HY-B0982S

Pindolol-d7 (LB-46-d7) is the deuterium labeled Pindolol. Pindolol (LB-46) is a nonselective  $\beta$ -blocker with partial beta-adrenergic receptor agonist activity, also functions as a 5-HT1A receptor weak partial antagonist ( $K_i \! = \! 33$  nM).

Purity: >98% Clinical Data:

Size: 2.5 mg, 1 mg, 5 mg, 10 mg, 25 mg

## Piperoxan hydrochloride

(Benodaine hydrochloride) Cat. No.: HY-100850

Piperoxan (Benodaine) hydrochloride is an  $\alpha_2$  adrenoceptor antagonist. Piperoxan hydrochloride is the first-generation antihistamine.

Purity: 99.39%

Clinical Data: No Development Reported

Size:  $10 \text{ mM} \times 1 \text{ mL}, 2 \text{ mg}, 5 \text{ mg}, 10 \text{ mg}, 25 \text{ mg}, 50 \text{ mg}, 100 \text{ mg}$ 

## Piribedil

Cat. No.: HY-12707

Piribedil is a dopamine  $D_2$  receptor ( $D_2R$ ) agonist which also displays antagonist property at  $h\alpha_{1a}$ -adrenoceptor ( $h\alpha_{1a}$ -AR).

Purity: 99.77% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

## Piribedil D8

(ET-495 D8) Cat. No.: HY-12707S

Piribedil D8 (ET-495 D8) is the deuterium labeled Piribedil, which is an antiparkinsonian agent.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Practolol

Cat. No.: HY-119802

Practolol is a potent and selective  $\beta 1$ -adrenergic receptor antagonist. Practolol can be used for the research of cardiac arrhythmias.

Purity: 99.86%

Clinical Data: No Development Reported
Size: 10 mg, 25 mg, 50 mg, 100 mg

## Practolol-d7

Cat. No.: HY-119802S

(Rac)-Practolol-d7 is the deuterium labeled Practolol. Practolol is a potent and selective  $\beta 1$ -adrenergic receptor antagonist. Practolol can be used for the research of cardiac arrhythmias.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Prazobind

(SZL 49) Cat. No.: HY-118335

Prazobind (SZL 49), a prazosin analog, is a potent alpha 1-adrenoceptor blocker. Prazobind competes for alpha 1-adrenoceptor binding sites with a similar potency (IC $_{\rm S0}$ =1 nM) in tissues enriched in both the alpha 1A (hippocampus) and alpha 1B (liver) subtypes.

O NHO

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Prazosin

Cat. No.: HY-B0193

Prazosin is an alpha-adrenergic blocker and is a sympatholytic drug used to treat high blood pressure and anxiety, PTSD, and panic disorder. Target: Adrenergic Receptor Prazosin, is a sympatholytic drug used to treat high blood pressure and anxiety, PTSD, andpanic disorder.

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

## Prazosin hydrochloride

Cat. No.: HY-B0193A

Prazosin hydrochloride is a well-tolerated, CNS-active  $\alpha 1$ -adrenergic receptor antagonist for the research of high blood pressure and alcohol use disorders.

NH2 HCI

Purity: 99.93% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg, 200 mg, 500 mg

## Prazosin-d8

Cat. No.: HY-B0193S

Prazosin D8 is the deuterium labeled Prazosin. Prazosin is an alpha-adrenergic blocker and is a sympatholytic drug used to treat high blood pressure and anxiety, PTSD, and panic disorder.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Prenalterol

Cat. No.: HY-112071

Prenalterol is a selective  $\beta 1$ -adrenergic receptor agonist. Prenalterol has no effect on gut smooth muscle contractile activity. Prenalterol can be used for researching cardiovascular disease.

**Purity:** 99.18%

Clinical Data: No Development Reported

Size: 5 mg

## Pronethalol

((±)-Pronethalo)

Pronethalol (( $\pm$ )-Pronethalo) is a non-selective  $\beta$ -adrenergic antagonist. Pronethalol is a potent inhibitor of Sox2 expression. Pronethalol protects against and to reverse Digitalis-induced ventricular arrhythmias and limits the cerebral arteriovenous malformation (AVMs).

Cat. No.: HY-B1238

Purity: 99.36%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

## Pronethalol hydrochloride

((±)-Pronethalo hydrochloride)

Pronethalol (( $\pm$ )-Pronethalo) is a non-selective  $\beta$ -adrenergic antagonist. Pronethalol is a potent inhibitor of Sox2 expression. Pronethalol protects against and to reverse Digitalis-induced ventricular arrhythmias, and limits the cerebral arteriovenous malformation (AVMs).

HCI

Cat. No.: HY-B1238A

Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

**Purity:** >98%

Size: 100 mg, 250 mg, 500 mg

## Pronethalol-d6

Cat. No.: HY-B1238S

Pronethalol-d6 (( $\pm$ )-Pronethalo-d6) is the deuterium labeled Pronethalol. Pronethalol (( $\pm$ )-Pronethalo) is a non-selective  $\beta$ -adrenergic antagonist. Pronethalol is a potent inhibitor of Sox2 expression.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## Propafenone

(SA-79)

Propafenone (SA-79), a **sodium-channel** blocker, acts an antiarrhythmic agent. Propafenone also has high affinity for the  $\beta$  receptor (IC<sub>sn</sub>=32 nM).



Cat. No.: HY-B0432

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

## Propranolol

Propranolol is a nonselective  $\beta$ -adrenergic receptor (BAR) antagonist, has high affinity for the B1AR and β2AR with K<sub>i</sub> values of 1.8 nM and 0.8 nM, respectively. Propranolol inhibits [3H]-DHA binding to rat brain membrane preparation with an IC<sub>50</sub> of 12 nM.

Purity: 99 87% Clinical Data: Launched 100 mg Size:

Cat. No.: HY-B0573B

## Propranolol hydrochloride

Propranolol hydrochloride is a nonselective **β-adrenergic receptor (βAR)** antagonist, has high affinity for the β1AR and β2AR with K, values of 1.8 nM and 0.8 nM, respectively.

HCI

Cat. No.: HY-B0573

Purity: 99 79% Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg, 500 mg, 1 g

## Propranolol-d7

Cat. No.: HY-B0573BS

Propranolol-d7 is the deuterium labeled Propranolol. Propranolol is a nonselective β-adrenergic receptor (βAR) antagonist, has high affinity for the  $\beta$ 1AR and  $\beta$ 2AR with K, values of 1.8 nM and 0.8 nM, respectively.

Purity: >98%

Clinical Data: No Development Reported

2.5 mg, 25 mg

## Propranolol-d7 (ring-d7)

Cat. No.: HY-B0573S1

Propranolol-d7 (ring-d7) is the deuterium labeled Propranolol hydrochloride. Propranolol hydrochloride is a nonselective  $\beta$ -adrenergic receptor (βAR) antagonist, has high affinity for the β1AR and β2AR with K, values of 1.8 nM and 0.8

nM, respectively.

**Purity:** 

Clinical Data: No Development Reported 1 mg, 5 mg, 10 mg



## Propranolol-d7 hydrochloride

Cat. No.: HY-B0573S

Propranolol D7 hydrochloride is a deuterium labeled Propranolol hydrochloride. Propranolol hydrochloride is a nonselective β-adrenergic receptor (βAR) antagonist, has high affinity for the β1AR and β2AR with K, values of 1.8 nM and 0.8 nM, respectively.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## QF0301B

Cat. No.: HY-101690

QF0301B is an α1 adrenergic receptor antagonist and a low  $\alpha 2$  adrenoceptor, 5-HT2A, and histamine H1 receptor blocker.



**Purity:** >98%

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## rac Timolol-d5 maleate

Cat. No.: HY-17494S

(Rac)-Timolol-d5 Maleate ((Rac)-L-714,465-d5 Maleate) is a labelled racemic (S)-Timolol maleate. (S)-Timolol Maleate (L-714,465 Maleate) is a non-cardioselective hydrophilic **β-adrenoceptor** blocker.

Purity:

Clinical Data:

Size: 1 mg, 10 mg

>98%

## Rauwolscine hydrochloride (a-Yohimbine hydrochloride;

Corynanthidine hydrochloride; Isoyohimbine hydrochloride) Cat. No.: HY-12710A

Rauwolscine hydrochloride is a potent and specific α2 adrenergic receptor antagonist with a K, of 12



≥98.0% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg, 100 mg

Reboxetine mesylate

(FCE20124 mesylate; PNU155950E mesylate) Cat. No.: HY-14560C

Reboxetine mesylate (FCE20124 mesylate) is a potent, selective, and specific noradrenaline reuptake inhibitor (NARI) for the research of depression. Reboxetine mesylate inhibits the uptake of norepinephrine, with a K<sub>i</sub> of 8 nM.

Purity: 99.87% Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## Reproterol

Cat. No.: HY-135490

Reproterol is a dual acting **B2-adrenoceptor** agonist and PDE inhibitor. The theophylline constituent of Reproterol inhibits phosphodiesterase activity induced by adenylyl cyclase. Reproterol.

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Rilmenidine

Rilmenidine, an innovative antihypertensive agent, is an orally active, selective I1 imidazoline receptor agonist. Rilmenidine is an alpha 2-adrenoceptor agonist. Rilmenidine induces autophagy.

**Purity:** >98% Clinical Data: Launched Size: 1 mg, 5 mg

## Cat. No.: HY-100490

$$\left\langle \begin{array}{c} 0 \\ N \end{array} \right\rangle \left\langle \begin{array}{c} 1 \\ N \end{array} \right\rangle$$

## Rilmenidine phosphate

## Cat. No.: HY-100490B

Rilmenidine phosphate, an innovative antihypertensive agent, is an orally active, selective I1 imidazoline receptor agonist. Rilmenidine phosphate is an alpha 2-adrenoceptor agonist. Rilmenidine phosphate induces autophagy.

Purity: Clinical Data: Launched

5 mg, 10 mg, 25 mg Size:

## >98.0%

## Ritanserin

#### (R 55667) Cat. No.: HY-10791

Ritanserin (R 55667) is a highly potent, relatively selective, orally active, long acting antagonist of 5-HT, receptor, with an IC, of 0.9 nM, less active on Histamine H<sub>1</sub>, Dopamine  $D_{2}$ , Adrenergic  $\alpha_{1}$ , Adrenergic  $\alpha_{2}$  receptors.

Cat. No.: HY-123268

Cat. No.: HY-75502

Purity: 99 78% Clinical Data: Phase 2

Size: 10 mM × 1 mL, 5 mg

## Ro 363

# Ro 363, an effective inotropic stimulant, is a

potent and highly selective β1-adrenoceptor agonist. RO 363 is a cardiovascular modulator that reduces diastolic blood pressure and pronounces increases in myocardial contractility.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Rotigotine

## (N-0437; N-0923)

Rotigotine (N-0437; N-0923) is a full agonist of dopamine receptor, a partial agonist of the 5-HT1A receptor, and an antagonist of the α2B-adrenergic receptor, with K<sub>s</sub> of 0.71nM, 4-15nM, and 83nM for the dopamine D3 receptor and D2, D5, D4 receptors, and dopamine...

99.98% Purity: Clinical Data: Launched

Size 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Rilmenidine hemifumarate

Rilmenidine hemifumarate, an innovative antihypertensive agent, is an orally active. selective I1 imidazoline receptor agonist. Rilmenidine hemifumarate is an alpha 2-adrenoceptor agonist. Rilmenidine hemifumarate

induces autophagy.

Purity: 99 82% Clinical Data: Launched 5 mg, 10 mg Size:

Cat. No.: HY-100490A

## Rilmenidine-d4

## Rilmenidine-d4 is the deuterium labeled Rilmenidine Rilmenidine an innovative antihypertensive agent, is an orally active, selective I1 imidazoline receptor agonist. Rilmenidine is an alpha 2-adrenoceptor agonist.

Rilmenidine induces autophagy.

>98% **Purity:** 

Clinical Data: No Development Reported

1 mg, 5 mg

Cat. No.: HY-100490S

## Ritodrine hydrochloride

## (DU21220 hydrochloride)

Ritodrine hydrochloride (DU21220 hydrochloride) is a  $\beta$ -2 adrenergic receptor agonist. Target:  $\beta$ -2 Adrenergic Receptor Ritodrine is a tocolytic drug, used to stop premature labor.

Cat. No.: HY-123268A

Cat. No.: HY-B0452

Purity: 99.90% Clinical Data: Launched

Size 10 mM × 1 mL, 100 mg, 500 mg

## Ro 363 hydrochloride

Ro 363 hydrochloride, an effective inotropic stimulant, is a potent and highly selective **β1-adrenoceptor** agonist. Ro 363 hydrochloride is a cardiovascular modulator that reduces diastolic blood pressure and pronounces increases in

myocardial contractility.

Purity: 95.88%

Clinical Data: No Development Reported

Size: 10 ma

## Rotigotine Hydrochloride

## (N-0923 Hydrochloride)

Rotigotine Hydrochloride (N-0923 Hydrochloride) is a full agonist of dopamine receptor, a partial agonist of the 5-HT1A receptor, and an antagonist of the  $\alpha 2B$ -adrenergic receptor, with  $K_i$ of 0.71nM, 4-15nM, and 83nM for the dopamine D3 receptor and D2, D5, D4 receptors, and dopamine...

Purity: 99.47% Clinical Data: Launched

10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg

H-CI

Cat. No.: HY-A0007

## RS 17053 hydrochloride

(RS-17053) Cat. No.: HY-101336

RS 17053 hydrochloride is a potent and selective  $\alpha 1_A$  adrenoceptor antagonist, with a pK<sub>1</sub> value of 9.1 in native cell membrane and a pA<sub>2</sub> value of 9.8 in functional assays.

**Purity:** 99.11%

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Salbutamol

(Albuterol; AH-3365) Cat. No.: HY-B1037

Salbutamol is a short-acting  $\beta$ 2-adrenergic receptor agonist used for the relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease (COPD).

Purity: 99.92% Clinical Data: Launched Size: 100 mg, 500 mg

## Salbutamol hemisulfate

(Albuterol hemisulfate; AH-3365 hemisulfate) Cat. No.: HY-B0436

Salbutamol Hemisulfate (Albuterol hemisulfate) is a short-acting  $\beta 2$  adrenergic receptor agonist Target:  $\beta 2$  Adrenergic Receptor Salbutamol Hemisulfate (Albuterol hemisulfate) is a short-acting, selective beta2-adrenergic receptor agonist used in the treatment of asthma and...

Purity: ≥98.0%
Clinical Data: Launched

Size: 10 mM × 1 mL, 100 mg, 500 mg

## Salbutamol-d3

(Albuterol-d3; AH-3365-d3)

Salbutamol-d3 (Albuterol-d3) is the deuterium labeled Salbutamol. Salbutamol is a short-acting  $\beta 2$ -adrenergic receptor agonist used for the relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease (COPD).



Cat. No.: HY-B1037S

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Salbutamol-d9

(Albuterol-d9; AH-3365-d9) Cat. No.: HY-B1037S2

Salbutamol-d9 (Albuterol-d9) is the deuterium labeled Salbutamol. Salbutamol is a short-acting  $\beta$ 2-adrenergic receptor agonist used for the relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease (COPD).

**Purity:** > 98%

Clinical Data: No Development Reported

**Size**: 2.5 mg, 25 mg

## Salmeterol

(GR33343X) Cat. No.: HY-14302

Salmeterol (GR33343X) is a potent and selective human  $\beta 2$  adrenoceptor agonist. Salmeterol shows potent stimulation of cAMP accumulation in CHO cells expressing human  $\beta 2$ ,  $\beta 1$  and  $\beta 3$  adrenoceptors with pEC<sub>50</sub>s of 9.6, 6.1, and 5.9, respectively.

\*

Purity: 99.88% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Salmeterol xinafoate

(GR 33343X xinafoate) Cat. No.: HY-17453

Salmeterol (GR 33343X) xinafoate is a potent and selective human  $\beta 2$  adrenoceptor agonist. Salmeterol shows potent stimulation of cAMP accumulation in CHO cells expressing human  $\beta 2$ ,  $\beta 1$  and  $\beta 3$  adrenoceptors with pEC<sub>50</sub>S of 9.6, 6.1, and 5.9, respectively.

Purity: 99.88%
Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Salmeterol-D3

Salmeterol-D3 is a deuterium labeled Salmeterol.
Salmeterol is a potent and selective human β2
adrenoceptor agonist. Salmeterol shows potent

stimulation of cAMP accumulation in CHO cells expressing human  $\beta 2$ ,  $\beta 1$  and  $\beta 3$  adrenoceptors with  $pEC_{so}$ s of 9.6, 6.1, and 5.9, respectively.

**Purity:** 99.81%

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg

Cat. No.: HY-135119

## Salmeterol-d3 xinafoate

(GR 33343X-d3 xinafoate) Cat. No.: HY-17453S

Salmeterol-d3 (GR 33343X-d3) xinafoate is the deuterium labeled Salmeterol xinafoate. Salmeterol (GR 33343X) xinafoate is a potent and selective human  $\beta 2$  adrenoceptor agonist.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Salmeterol-d4

Cat. No.: HY-14302S

Salmeterol-d4 is the deuterium labeled Salmeterol. Salmeterol (GR33343X) is a potent and selective human  $\beta 2$  adrenoceptor agonist.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## SB-206606

SB-206606, a stereoisomer of BRL 37344, is a potentially specific, beta 3-adrenergic receptor  $(\beta_3$ -AR) ligand. The affinity of [3H]SB 206606 is 76 times higher for the  $\beta_3$ -AR than for the beta 1/beta 2-adrenergic receptors.

Cat. No.: HY-117239

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Scopine hydrochloride

## (6,7-Epoxytropine hydrochloride)

>98%

Clinical Data: No Development Reported

1 mg, 5 mg, 10 mg

SCH 39166 hydrobromide

selective antagonist of dopamine D1/D5

receptor, with Kis of 1.2 nM and 2.0 nM,

(SCH391660)

respectively.

Purity:

Size:

Scopine hydrochloride (6,7-Epoxytropine hydrochloride) is the metabolite of anisodine, which is a  $\alpha$ 1-adrenergic receptor agonist and used in the treatment of acute circulatory shock.

SCH 39166 hydrobromide (SCH391660) is potent and



Cat. No.: HY-B0459A

Cat. No.: HY-110033

HBr

CI

Cat. No.: HY-14543S

Cat. No.: HY-32329S

**Purity:** >98.0%

Clinical Data: No Development Reported

10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Sertindole-d4 (Lu 23-174-d4) is the deuterium

labeled Sertindole. Sertindole, a neuroleptic, is

one of the newer antipsychotic medications

## Scopine

## (6,7-Epoxytropine)

Scopine is the metabolite of anisodine, which is a  $\alpha \mbox{1-adrenergic}$  receptor agonist and used in the treatment of acute circulatory shock.



Cat. No.: HY-B0459

Purity: > 98.0%

Clinical Data: No Development Reported

10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Sertindole

#### (Lu 23-174) Cat. No.: HY-14543

Sertindole, a neuroleptic, is one of the newer antipsychotic medications available. Target: Multi-target In vitro studies showed that sertindole exerts a potent antagonism at serotonin 5-HT2A, 5-HT2C, dopamine D2, and αl adrenergic receptors.



Size: 10 mM × 1 mL, 10 mg, 50 mg



## Setiptiline

#### (Org-8282) Cat. No.: HY-32329

Setiptiline (Org-8282) is a serotonin receptor antagonist. Setiptiline is a tetracyclic antidepressant (TeCA) which acts as a noradrenergic and specific serotonergic antidepressant (NaSSA).

96.54% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg



## Sibenadet hydrochloride

#### (AR-C68397AA) Cat. No.: HY-124270

Sibenadet hydrochloride (AR-C68397AA) is a dual D2 dopamine receptor, beta2-adrenoceptor agonist with bronchodilator activity.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# available.

Sertindole-d4

Purity: >98% Clinical Data:

Size 1 mg

## Setiptiline-d3

Setiptiline-d3 (Org-8282-d3) is the deuterium labeled Setiptiline. Setiptiline (Org-8282) is a serotonin receptor antagonist. Setiptiline is a tetracyclic antidepressant (TeCA) which acts as a noradrenergic and specific serotonergic antidepressant (NaSSA).

Purity: >98% Clinical Data:

Size: 1 mg, 10 mg

Silodosin (KAD 3213; KMD 3213)

Silodosin (KAD 3213; KMD 3213) is a potent,

selective and orally active  $\alpha 1A$ -adrenergic receptor (α1A-AR) blocker.

Cat. No.: HY-10122

99.87% Clinical Data: Launched

10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Silodosin-d4

Silodosin-d4 (KAD 3213-d4) is the deuterium labeled Silodosin. Silodosin (KAD 3213) is a potent, selective and orally active  $\alpha 1A$ -adrenergic receptor ( $\alpha 1A$ -AR) blocker.

F F F O D NH2 OH

Cat. No.: HY-10122S

**Purity:** >98%

Clinical Data:

Size: 2.5 mg, 1 mg, 5 mg, 10 mg

## Silodosin-d6

Silodosin-d6 is the deuterium labeled Silodosin. Silodosin (KAD 3213; KMD 3213) is a potent, selective and orally active  $\alpha 1A$ -adrenergic receptor ( $\alpha 1A$ -AR) blocker.



Cat. No.: HY-10122S1

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## SM-2470

SM-2470 is a potent  $\alpha$ 1-adrenoceptor antagonist, has sympathetic nerve activity in anesthetized rats. SM-2470 is an antihypertensive agent. SM-2470 exhibits hypocholesterolaemic effect by the inhibition of cholesterol absorption related to the reduction of cholesterol solubilization.

NH<sub>2</sub> HCI

Cat. No.: HY-19037

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Solabegron

(GW 427353) Cat. No.: HY-19436

Solabegron (GW 427353) is a selective  $\beta_3$ -adrenergic receptor agonist, stimulating cAMP accumulation in Chinese hamster ovary cells expressing the human  $\beta_3$ -AR, with an EC<sub>50</sub> value of 22 nM.

Purity: 99.91% Clinical Data: Phase 2

Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg

## Spiperone hydrochloride

## (Spiroperidol hydrochloride)

Spiperone hydrochloride (Spiroperidol hydrochloride) is a selective **dopamine**  $D_2$  **receptor** (**K**, values of 0.06 nM, 0.6 nM, 0.8 nM, ~350 nM, ~3500 nM for  $D_2$ ,  $D_3$ ,  $D_4$ ,  $D_1$  and  $D_5$  receptors, respectively) and  $S-HT_{2A}/S-HT_{1A}$  **receptor** (**K**,s of 1 nM/49 nM)...

Cat. No.: HY-B1371A

Purity: 99.10%

Clinical Data: No Development Reported

Size: 10 mg

## Spirendolol

(Li 32-468; S 32-468; Substance 32468)

Spirendolol is a  $\beta$  adrenergic receptor antagonist.

O OH H

Cat. No.: HY-101817

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## SR59230A

## Cat. No.: HY-100672

SR59230A is a potent, selective, and blood-brain barrier penetrating  $\beta 3\text{-adrenergic receptor}$  antagonist with  $IC_{s0}s$  of 40, 408, and 648 nM for  $\beta 3,\,\beta 1,$  and  $\beta 2$  receptors, respectively.

**Purity:** ≥98.0%

Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## SR59230A hydrochloride

SR59230A hydrochloride is a potent, selective, and blood-brain barrier penetrating  $\beta$ 3-adrenergic receptor antagonist with  $IC_{so}$ 8 of 40, 408, and 648 nM for  $\beta$ 3,  $\beta$ 1, and  $\beta$ 2 receptors, respectively.

Cat. No.: HY-103200

Purity: 99.88%

ST1936 oxalate

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## ST1936

## Cat. No.: HY-103110

ST1936 is a selective, nanomolar affinity 5-HT<sub>6</sub> receptor agonist with K<sub>1</sub> values of 13 nM, 168 nM and 245 nM for human 5-HT<sub>6</sub>, 5-HT<sub>7</sub> and 5-HT<sub>28</sub> receptors, respectively. ST1936 also shows moderate affinity (K<sub>1</sub> of 300 nM) for human and rat  $\alpha 2$  adrenergic receptor.

Purity: 99.70%

Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

# Y-103110

ST1936 oxalate is a selective, nanomolar affinity 5-HT $_6$  receptor agonist with K $_1$  values of 13 nM, 168 nM and 245 nM for human 5-HT $_6$ , 5-HT $_7$  and 5-HT $_2$  receptors, respectively. ST1936 oxalate also shows moderate affinity (K $_1$  of 300 nM) for human and rat  $\alpha 2$  adrenergic receptor.

CI HO OF

Cat. No.: HY-103110A

ourity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Sulfinalol

Cat. No.: HY-106499

Sulfinalol is an orally active β-adrenoceptor antagonist with direct vasodilator activity.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Synephrine

(Oxedrine) Cat. No.: HY-N0132

Synephrine (Oxedrine), an alkaloid, is an α-adrenergic and β-adrenergic agonist derived from the Citrus aurantium. Synephrine is a sympathomimetic compound and can be used for weight loss.

Purity: 98 72%

Clinical Data: No Development Reported

Size: 5 mg

## Synephrine hemitartrate

(Oxedrine hemitartrate) Cat. No.: HY-N0132B

Synephrine (Oxedrine) hemitartrate, an alkaloid, is an  $\alpha$ -adrenergic and  $\beta$ -adrenergic agonist derived from the Citrus aurantium. Synephrine hemitartrate is a sympathomimetic compound and can be used for weight loss.

Purity: >98%

Clinical Data: No Development Reported 5 mg, 10 mg, 25 mg

# Synephrine hydrochloride

(Oxedrine hydrochloride)

Synephrine (Oxedrine) hydrochloride, an alkaloid, is an  $\alpha$ -adrenergic and  $\beta$ -adrenergic agonist derived from the Citrus aurantium. Synephrine hydrochloride is a sympathomimetic compound and can be used for weight loss.

**Purity:** 

Clinical Data: No Development Reported 10 mM × 1 mL, 100 mg, 500 mg



Cat. No.: HY-N0132A

## Talibegron hydrochloride

(ZD2079 hydrochloride) Cat. No.: HY-15378

Talibegron hydrochloride (ZD2079 hydrochloride) is a potent β3-adrenoceptor agonist with a pD2 of 3.72 on phenylephrine-preconstricted rat mesenteric artery. Talibegron hydrochloride has potent vasorelaxant effect.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Talipexole dihydrochloride

(B-HT 920 dihydrochloride)

Talipexole dihydrochloride (B-HT 920 dihydrochloride) is a dopamine D2 receptor agonist, α2-adrenoceptor agonist and 5-HT3 receptor antagonist, which displays antiParkinsonian activity.

Cat. No.: HY-A0008

99 88% Purity: Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## **Tamsulosin**

((R)-(-)-YM12617 free base; LY253351 free base) Cat. No.: HY-B0661

Tamsulosin ((R)-(-)-YM12617 free base) is an inhibitor of  $\alpha_1$ -adrenergic receptor. Tamsulosin is used for the research of prostatic hyperplasia. Tamsulosin attenuates abdominal aortic aneurysm growth in animal models.

99.62% Purity: Clinical Data: Launched

10 mM × 1 mL, 10 mg, 50 mg, 100 mg Size:

## Tamsulosin hydrochloride

((R)-(-)-YM12617; LY253351)

Tamsulosin hydrochloride ((R)-(-)-YM12617) is an inhibitor of  $\alpha_1$ -adrenergic receptor. Tamsulosin hydrochloride is used for the research of prostatic hyperplasia. Tamsulosin hydrochloride attenuates abdominal aortic aneurysm growth in animal models.

Purity: >98% Clinical Data: Launched Size



Cat. No.: HY-B0661A

1 mg, 5 mg

## Tamsulosin-d4 hydrochloride

((R)-(-)-YM12617-d4; LY253351-d4) Cat. No.: HY-B0661AS1

Tamsulosin-d4 (hydrochloride) is deuterium labeled Tamsulosin (hydrochloride). Tamsulosin hydrochloride ((R)-(-)-YM12617) is an inhibitor of α1-adrenergic receptor. Tamsulosin hydrochloride is used for the research of prostatic hyperplasia.

Purity: >98%

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## Tamsulosin-d5 hydrochloride

Cat. No.: HY-B0661AS

Tamsulosin-d5 hydrochloride is the deuterium labeled Tamsulosin hydrochloride. Tamsulosin hydrochloride ((R)-(-)-YM12617) is an inhibitor of α<sub>1</sub>-adrenergic receptor. Tamsulosin hydrochloride is used for the research of prostatic hyperplasia.

>98%

Clinical Data: No Development Reported

1 mg, 5 mg

## TD-5471 hydrochloride

Cat. No.: HY-19942A

TD-5471 hydrochloride is a potent and selective full agonist of the human  $\beta_2$ -adrenoceptor.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Tedatioxetine hydrobromide

(Lu AA24530 hydrobromide)

Cat. No.: HY-101755

Tedatioxetine (Lu AA24530) hydrobromide acts as a serotonin and norepinephrine (NE)-preferring triple reuptake inhibitor (TRI) and 5-HT<sub>24</sub>, 5-HT<sub>2C</sub>, 5-HT<sub>3</sub> and  $\alpha_{1A}$ -adrenergic receptor antagonist < br/>>.,.

H-Br

Cat. No.: HY-B0371

99 98% Purity:

Clinical Data: No Development Reported

10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## **Teoprolol**

Cat. No.: HY-U00016

Teoprolol is a β-adrenergic receptor blocker.

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## Terazosin

Terazosin is a quinazoline derivative and a competitive and orally active  $\alpha 1$ -adrenoceptor antagonist. Terazosin works by relaxing blood vessels and the opening of the bladder. Terazosin has the potential for benign prostatic hyperplasia

(BPH) and high blood pressure treatment. >98%

**Purity:** Clinical Data: Launched

5 mg, 10 mg, 25 mg

## Terazosin dimer impurity dihydrochloride

Cat. No.: HY-131449

Terazosin dimer impurity dihydrochloride, a dimer of Terazosin, is an impurity of Terazosin. Terazosin is a quinazoline derivative and a competitive and orally active  $\alpha$ 1-adrenoceptor antagonist.

Purity: >98%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

## Terazosin hydrochloride

Cat. No.: HY-B0371F

Terazosin hydrochloride is a quinazoline derivative and a competitive and orally active **α1-adrenoceptor** antagonist. Terazosin hydrochloride works by relaxing blood vessels and the opening of the bladder.

>98% Purity: Clinical Data: Launched Size 1 mg, 5 mg

## Terazosin hydrochloride dihydrate

Cat. No.: HY-B0371A

Terazosin hydrochloride dihydrate is a quinazoline derivative and a competitive and orally active **α1-adrenoceptor** antagonist. Terazosin hydrochloride dihydrate works by relaxing blood vessels and the opening of the bladder.

Purity: 99.80% Clinical Data: Launched

10 mM × 1 mL, 100 mg Size:

## Terazosin-d8

Terazosin-d8 is deuterium labeled Terazosin. Terazosin is a quinazoline derivative and a competitive and orally active  $\alpha$ 1-adrenoceptor antagonist. Terazosin works by relaxing blood vessels and the opening of the bladder.

Cat. No.: HY-B0371S

Purity: >98%

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## **Terbutaline**

Cat. No.: HY-B0802A

Terbutaline is a short-acting agonist of  $\beta^2$ -adrenergic receptor ( $\beta^2$ -AR) . Terbutaline is an active metabolite of bambuterol and used as a bronchodilator and to prevent premature labor.

Purity: >98% Clinical Data: Launched Size: 1 mg, 5 mg

## Terbutaline sulfate

(Terbutaline hemisulfate)

Terbutaline sulfate is a β2-adrenergic receptor agonist; a fast-acting bronchodilator and a tocolytic to delay premature labor.

0.5H<sub>2</sub>SO<sub>4</sub>

Cat. No.: HY-B0802

99.83% Clinical Data: Launched

10 mM × 1 mL, 500 mg, 1 g, 5 g

## **Tertatolol**

## ((±)-Tertatolol; Racemic Tertatolol; dl-Tertatolol)

Tertatolol is a potent antagonist of beta-adrenoceptor and 5-HT receptor, with unique renal vasodilatatory effects.

Cat. No.: HY-B0556

Cat. No.: HY-U00356

Purity: >98% Clinical Data: Launched Size: 1 mg, 5 mg

## Tetrahydroalstonine

Tetrahydroalstonine, a indole alkaloid isolated from the fruits of Rhazva stricta, is a selective alpha 2-adrenoceptor antagonist.



Cat. No.: HY-N1163

Purity: 99 95%

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 1 mg, 5 mg

## Tetrahydrozoline

## (Tetryzoline)

Tetrahydrozoline (Tetryzoline), a derivative of imidazoline, is an  $\alpha$ -adrenergic agonist that causes vasoconstriction. Tetrahydrozoline is widely used for the research of nasal congestion and conjunctival congestion.

Purity: >98% Clinical Data: Launched 1 mg, 5 mg

# Tetrahydrozoline hydrochloride

## (Tetryzoline hydrochloride)

Tetrahydrozoline hydrochloride (Tetryzoline hydrochloride), a derivative of imidazoline, is an  $\alpha$ -adrenergic agonist that causes vasoconstriction. Tetrahydrozoline hydrochloride is widely used for the research of nasal congestion and conjunctival congestion.

**Purity:** 99.90% Clinical Data: Launched

10 mM × 1 mL, 500 mg



HCI

## Tetrahydrozoline-d4 hydrochloride

## (Tetryzoline-d4 hydrochloride)

Tetrahydrozoline-d4 (Tetryzoline-d4) hydrochloride is the deuterium labeled Tetrahydrozoline hydrochloride. Tetrahydrozoline hydrochloride (Tetryzoline hydrochloride), a derivative of imidazoline, is an  $\alpha$ -adrenergic agonist that causes vasoconstriction.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 10 mg

## **Tiodazosin** (BL-5111)

## Cat. No.: HY-100255

Tiodazosin is a potent competitive postsynaptic alpha adrenergic receptor antagonist.



>98% Purity:

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## **Tizanidine**

## Cat. No.: HY-B0194

Cat. No.: HY-B0556AS

Tizanidine is an  $\alpha 2$ -adrenergic receptor agonist and inhibits neurotransmitter release from CNS noradrenergic neurons. Target: α2-adrenergic receptor Tizanidine is a drug that is used as a muscle relaxant. It is a centrally acting  $\alpha 2$ adrenergic agonist.

>98% Purity: Clinical Data: Launched 1 mg, 5 mg Size:

## Tizanidine hydrochloride

Tizanidine hydrochloride is an α2-adrenergic receptor agonist and inhibits neurotransmitter release from CNS noradrenergic neurons. Target: α2-adrenergic receptor Tizanidine is a drug that is used as a muscle relaxant. It is a centrally acting  $\alpha 2$  adrenergic agonist.

Purity: 99.67% Clinical Data: Launched

Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Cat. No.: HY-B0194A

HCI

## Tizanidine-d4

## Cat. No.: HY-B0194S

Tizanidine-d4 is the deuterium labeled Tizanidine. Tizanidine is an  $\alpha$ 2-adrenergic receptor agonist and inhibits neurotransmitter release from CNS noradrenergic neurons.

>98%

Clinical Data:

Purity:

Size: 1 mg, 5 mg, 10 mg

## Tizanidine-d4 hydrochloride

# Cat. No.: HY-B0194AS

Tizanidine-d4 (hydrochloride) is deuterium labeled Tizanidine (hydrochloride).

>98%

Clinical Data: No Development Reported

1 mg, 5 mg

## **Todralazine**

(Ecarazine) Cat. No.: HY-B1001

Todralazine (Ecarazine) is an anti-hypertensive agent, acts as a β, AR blocker, with antioxidant and free radical scavenging activity.

>98% Purity: Clinical Data: Launched Size: 1 mg, 5 mg

## Todralazine hydrochloride

(Ecarazine hydrochloride)

Todralazine hydrochloride (Ecarazine hydrochloride) is an anti-hypertensive agent, acts as a β<sub>2</sub>AR blocker, with antioxidant and free radical scavenging activity.

Cat. No.: HY-B1001A

98 17% Purity:

Clinical Data: No Development Reported

10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Tolazoline

(Imidaline; NSC35110) Cat. No.: HY-A0066

Tolazoline(Imidaline) is a non-selective competitive  $\alpha$ -adrenergic receptor antagonist.

Purity: >98% Clinical Data: Launched Size 500 mg

## Tolazoline hydrochloride

(Imidaline hydrochloride; NSC35110 hydrochloride)

Tolazoline (hydrochloride)(Imidaline (hydrochloride)) Hcl is a non-selective competitive  $\alpha$ -adrenergic receptor antagonist.



H-CI

Cat. No.: HY-A0066A

**Purity:** ≥98.0% Clinical Data: Launched

10 mM × 1 mL, 500 mg, 1 g, 5 g

#### Trimazosin

Cat. No.: HY-106554

Trimazosin is an orally active, quinazoline derivative which is structurally related to prazosin. Trimazosin shows hypotensive effect by selectively block  $\alpha 1$ -adrenoceptors.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **Tropodifene**

(Tropaphen) Cat. No.: HY-U00313

Tropodifene (Tropaphen) is an  $\alpha$ -Adrenergic receptor inhibitor.

>98% Purity:

Clinical Data: No Development Reported

Size 1 mg, 5 mg

## **Tulobuterol**

(C-78 free base) Cat. No.: HY-B1810

Tulobuterol (C-78 free base) is a long-acting  $\beta_2$ -adrenoceptor agonist, which reduces the frequency of exacerbations of chronic obstructive pulmonary disease and bronchial asthma.

≥98.0% Purity: Clinical Data: Launched Size: 50 mg, 100 mg

## Tulobuterol hydrochloride

(C-78)Cat. No.: HY-W011733

Tulobuterol hydrochloride (C-78) is a long-acting β<sub>2</sub>-adrenoceptor agonist, which reduces the frequency of exacerbations of chronic obstructive pulmonary disease and bronchial asthma..

**HCI** 

Purity: Clinical Data: Launched

99.69%

Size: 10 mM × 1 mL, 50 mg, 100 mg, 500 mg

## Tulobuterol-D9 hydrochloride

(C-78-D9) Cat. No.: HY-B1810S

Tulobuterol-D9 hydrochloride (C-78-D9) is the deuterium labeled Tulobuterol. Tulobuterol (C-78 free base) is a long-acting  $\beta_2$ -adrenoceptor agonist, which reduces the frequency of exacerbations of chronic obstructive pulmonary disease and bronchial asthma.

H-CI

Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg

>98%

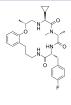
Purity:

## Ulimorelin

(TZP-101) Cat. No.: HY-14903

Ulimorelin (TZP-101) is a ghrelin receptor (GRLN) agonist with an EC<sub>50</sub> of 29 nM and a K<sub>i</sub> of 16 nM. Ulimorelin is a prokinetic agent and causes vasorelaxation through competitive antagonist action at a1-adrenoceptors. Ulimorelin stimulates intestinal motility and is used for malnutrition.

>98% Clinical Data: Phase 3 1 mg, 5 mg



## Urapidil

Cat. No.: HY-B0716

Urapidil is an  $\alpha 1$  adrenoreceptor antagonist and a 5-HT<sub>1 $\alpha$ </sub> receptor agonist.

Purity: 99.94% Clinical Data: Launched

Size: 10 mM × 1 mL, 50 mg

## **Urapidil D6**

Urapidil D6 is a deuterium labeled Urapidil. Urapidil is an  $\alpha$ 1-adrenoreceptor antagonist and a

5-HT<sub>1A</sub> receptor agonist.



Cat. No.: HY-B0716S

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Urapidil hydrochloride

Cat. No.: HY-B0354A

Urapidil HCl is an  $\alpha$ 1-adrenoceptor antagonist and 5-HT1A receptor agonist.

Purity: 98.95% Clinical Data: Launched

Size: 5 mg, 10 mg, 25 mg

## Urapidil-d3

Cat. No.: HY-B0716S1

Urapidil-d3 is the deuterium labeled Urapidil. Urapidil is an  $\alpha 1$  adrenoreceptor antagonist and a 5-HT $_{1A}$  receptor agonist.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Urapidil-d4 hydrochloride

Cat. No.: HY-B0354AS

Urapidil-d4 hydrochloride is the deuterium labeled Urapidil hydrochloride. Urapidil hydrochloride is an  $\alpha$ 1-adrenoceptor antagonist and 5-HT $_{1A}$  receptor agonist.

Purity: >98% Clinical Data:

Size: 1 mg, 10 mg

## Vanilpyruvic acid

(Vanylpyruvic acid) Cat. No.: HY-101416

Vanilpyruvic acid is a catecholamine metabolite and precursor to vanillactic acid.

Cat. No.: HY-19933

**Purity:** 98.28%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 10 mg

## Vatinoxan hydrochloride

(MK-467 hydrochloride; L-659066 hydrochloride) Cat. No.: HY-19057A

Vatinoxan hydrochloride (MK-467 hydrochloride;L-659066 hydrochloride) is a peripheral **α2** adrenergic receptor antagonist.



Purity: 99.86%

Clinical Data: No Development Reported Size: 5 mg, 10 mg, 25 mg

## Vibegron (MK-4618)

Vibegron (MK-4618) is a potent, highly selective  $\beta_3$ -adrenoceptor agonist (EC<sub>s0</sub>=1.1 nM). Vibegron can be used for severe urgency urinary incontinence related to overactive bladder.

HN

Purity: 98.82% Clinical Data: Launched Size: 5 mg, 10 mg

## Vilanterol

(GW642444) Cat. No.: HY-14300

Vilanterol (GW642444) is a long-acting  $\beta_2\text{-}adrenoceptor$  ( $\beta_2\text{-}AR)$  agonist with 24 h activity. The  $\text{pEC}_{so}\text{s}$  for  $\beta_2\text{-}AR,\beta_1\text{-}AR$  and  $\beta_3\text{-}AR$  is  $10.37\pm0.05,\,6.98\pm0.03$  and  $7.36\pm0.03,\,respectively.$ 

Purity: 96.66% Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Vilanterol trifenatate

(GW642444 trifenatate)

Vilanterol trifenatate (GW642444 trifenatate) is a long-acting  $\beta_2\text{-}adrenoceptor$   $(\beta_2\text{-}AR)$  agonist with inherent 24-hour activity. The  $\text{pEC}_{\text{50}}\text{s}$  for  $\beta_2\text{-}AR,\ \beta_1\text{-}AR$  and  $\beta_3\text{-}AR$  are 10.37, 6.98 and 7.36, respectively.



Cat. No.: HY-14300A

Purity: 99.20% Clinical Data: Launched

Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Vilanterol-d4 trifenatate

(GW642444-d4 trifenatate)

Vilanterol-d4 (trifenatate) is deuterium labeled Vilanterol (trifenatate), Vilanterol trifenatate (GW642444 trifenatate) is a long-acting β2-adrenoceptor (β2-AR) agonist with inherent 24-hour activity. The pEC50s for β2-AR, β1-AR and β3-AR are 10.37, 6.98 and 7.36, respectively.

Cat. No.: HY-14300AS

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

**Xamoterol** 

(Corwin; ICI 118587)

Cat. No.: HY-101327

## Xamoterol hemifumarate

(Corwin hemifumarate; ICI 118587 hemifumarate) Cat. No.: HY-101327A

Xamoterol hemifumarate is a selective and potent agonist of beta1-adrenergic receptor. Xamoterol hemifumarate has the potential for the research of arrhythmogenesis. Xamoterol hemifumarate has the potential for the investigating the relationship between \( \beta 1 - adrenergic stimulation \) and IKr.

≥98.0% Purity:

Clinical Data: No Development Reported

Size:

# Xylometazoline hydrochloride

Cat. No.: HY-B0475

Xylometazoline hydrochloride is an α-adrenoceptor agonist commonly used as nasal decongestant.

Xamoterol is a selective and potent agonist of

beta1-adrenergic receptor. Xamoterol has the

potential for the research of arrhythmogenesis.

Xamoterol has the potential for the investigating

the relationship between \$1-adrenergic stimulation

**Purity:** 99 58% Clinical Data: Launched

10 mM × 1 mL, 500 mg, 1 g

## **Yohimbine**

Cat. No.: HY-12715

Yohimbine is a potent and relatively nonselective alpha 2-adrenergic receptor (AR) antagonist, with IC50 of 0.6 μM.

Purity: 98.10% Clinical Data: Launched Size: 500 ma

## Yohimbine Hydrochloride

Cat. No.: HY-N0127

Yohimbine Hydrochloride is an alpha 2-adrenoreceptor antagonist, blocking the pre- and postsynaptic alpha-2 adrenoreceptors and causing an increased release of noradrenaline and dopamine.



99.69% Purity:

10 mM × 1 mL, 500 mg, 1 g Size:

Clinical Data: Launched

## Yohimbine-13C,d3

Cat. No.: HY-12715S

Yohimbine-13C,d3 is the 13C- and deuterium labeled Yohimbine. Yohimbine is a potent and relatively nonselective alpha 2-adrenergic receptor (AR) antagonist, with IC<sub>50</sub> of 0.6  $\mu$ M.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## **YS-49**

Cat. No.: HY-15477

YS-49 is a PI3K/Akt (a downstream target of RhoA) activator, to reduce RhoA/PTEN activation in the 3-methylcholanthrene-treated cells. YS-49 inhibits angiotensin II (Ang II)-stimulated proliferation of VSMCs via induction of heme oxygenase (HO)-1.

98.65% Purity:

Clinical Data: No Development Reported

10 mM × 1 mL, 10 mg, 50 mg

## YS-49 monohydrate

Cat. No.: HY-15477A

YS-49 (monohydrate) is a PI3K/Akt (a downstream target of RhoA) activator, to reduce RhoA/PTEN activation in the 3-methylcholanthrene-treated cells. YS-49 inhibits angiotensin II (Ang II)-stimulated proliferation of VSMCs via induction of heme oxygenase (HO)-1.

Purity: 99.56%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 10 mg, 50 mg HBr H<sub>2</sub>O

# Zilpaterol-d7

Cat. No.: HY-A0072S

Zilpaterol-d7 is a deuterium labeled Zilpaterol.

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## **Zinterol**

(MJ 9184) Cat. No.: HY-14304

Zinterol (MJ 9184) is a potent and selective **β2-adrenoceptor** agonist. Zinterol increases I<sub>co</sub> in a concentration-dependent manner with an EC<sub>50</sub> of 2.2 nM.

Purity: >98%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg

## ZK-90055 hydrochloride Cat. No.: HY-U00293

ZK-90055 hydrochloride is a β2 adrenergic receptor agonist.

Cat. No.: HY-U00333

Purity: >98%

Clinical Data: No Development Reported

1 mg, 5 mg

## α1 adrenoceptor-MO-1

α1 adrenoceptor-MO-1, an S enantiomer, has

affinity at alpha 1 adrenergic receptor, shows alphalytic activity, and possesses analgesic action; more active than R enantiomer.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

## Zinterol hydrochloride

(MJ 9184 hydrochloride)

Zinterol hydrochloride (MJ 9184 hydrochloride) is a potent and selective β2-adrenoceptor agonist. Zinterol hydrochloride increases  $I_{Ca}$  in a concentration-dependent manner with an EC<sub>so</sub> of 2.2 nM. Zinterol hydrochloride induces ventricular arrhythmias in conscious heart failure rabbits.

Purity: ≥99.0%

Clinical Data: No Development Reported 10 mM × 1 mL, 1 mg, 5 mg, 10 mg Size:

Cat. No.: HY-14304A

## Zotepine

Zotepine, an antipsychotic agent, is a potent antagonist of 5-HT<sub>2A</sub>, 5-HT<sub>2C</sub>, Histamine  $H_1$ ,  $\alpha_1$ -adrenergic and Dopamine D, receptors, with K<sub>a</sub>s of 2.6 nM, 3.2 nM, 3.3 nM, 7.3 nM and 8 nM, respectively. Zotepine exhibits antidepressive and anxiolytic effects in vivo.

99.66% **Purity:** 

Clinical Data: No Development Reported 10 mg, 25 mg, 50 mg



Cat. No.: HY-103093

## β3-AR agonist 1

β3-AR agonist 1 (compound 15) is a highly potent, selective, and orally available  $\beta 3$ -adrenergic receptor (β3-AR) agonist (EC<sub>s0</sub>=18 nM), being inactive to  $\beta1$ -,  $\beta2$ -, and  $\alpha1A$ -AR ( $\beta1/\beta3$ ,  $\beta2/\beta3$ ,

and  $\alpha 1A/\beta 3 > 556$ -fold).

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

Cat. No.: HY-101514

## β3-AR agonist 2

Cat. No.: HY-U00391

 $\beta_{\mbox{\scriptsize 3}}\mbox{-}\mbox{AR}$  agonist 2 is a potent and selective  $\beta_3$ -adrenergic receptor ( $\beta_3$ -AR) agonist with an  $EC_{50}$  of 8 nM.

>98% Purity:

Clinical Data: No Development Reported

Size: 1 mg, 5 mg