GPCR19

G-protein coupled receptor 19

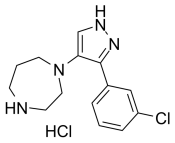
GPCR19 (TGR5, GPBAR1) is a plasma membrane-bound, G protein-coupled receptor that has bile acids as its ligand. GPCR19 is a regulator of energy homeostasis, bile acid homeostasis as well as glucose metabolism. GPCR19 transduces extracellular signals through heterotrimeric G proteins.

GPCR19 can be activated by bile acids and then it induces cAMP production. As a membrane receptor, GPCR19 can be internalized into the cytoplasm in response to its ligands. GPCR19 plays important roles in cell signaling pathways such as nuclear factor κB (NF-κB), AKT, and extracellular signal-regulated kinases (ERK). Its agonists may be potential drugs for the treatment of metabolic, inflammation, and digestive disorders. In addition, GPCR19 stimulates glucagon-like peptide 1 (GLP-1) secretion. It also has become an attractive therapeutic target for the prevention and/or the treatment of obesity and its highly associated Type II diabetes and metabolic syndrome.

5-HT7R antagonist 1

Cat. No.: HY-139677

5-HT7R antagonist 1 is a G protein-biased antagonist against **5-HT$_7$R** (K_i = 6.5 nM).

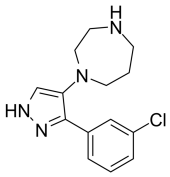


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

5-HT7R antagonist 1 free base

Cat. No.: HY-139677A

5-HT7R antagonist 1 (free base) is a G protein-biased antagonist against **5-HT$_7$R** (K_i = 6.5 nM).

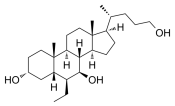


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

BAR501

Cat. No.: HY-101274

BAR501 is a potent and selective agonist of **GPBAR1** with an **EC$_{50}$** of 1 μM.

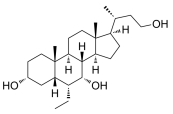


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

BAR502

Cat. No.: HY-101273

BAR502 is a dual **FXR** and **GPBAR1** agonist with **IC$_{50}$** values of 2 μM and 0.4 μM, respectively.



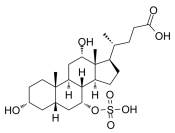
Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

Cholic acid 7-sulfate

(7-Sulfocholic acid)

Cat. No.: HY-126855

Cholic acid 7-sulfate (7-Sulfocholic acid), a metabolite of Cholic acid, is a **Takeda G-protein receptor 5 (TGR5)** agonist. Cholic acid 7-sulfate can increase Tgr5 expression and induce GLP-1 secretion.



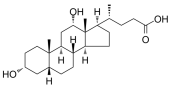
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Deoxycholic acid

(Cholanoic Acid; Desoxycholic acid)

Cat. No.: HY-N0593

Deoxycholic acid is specifically responsible for activating the G protein-coupled bile acid receptor **TGR5** that stimulates brown adipose tissue (BAT) thermogenic activity.



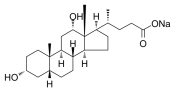
Purity: 99.89%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 500 mg

Deoxycholic acid sodium salt

(Sodium deoxycholate)

Cat. No.: HY-N0593A

Deoxycholic acid sodium salt is specifically responsible for activating the G protein-coupled bile acid receptor **TGR5** that stimulates brown adipose tissue (BAT) thermogenic activity.



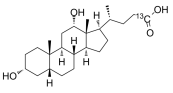
Purity: ≥98.0%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 500 mg

Deoxycholic acid-13C

(Cholanoic Acid-13C; Desoxycholic acid-13C)

Cat. No.: HY-N0593S3

Deoxycholic acid-13C (Cholanoic acid-13C) is the 13C-labeled Deoxycholic acid. Deoxycholic acid is specifically responsible for activating the G protein-coupled bile acid receptor **TGR5** that stimulates brown adipose tissue (BAT) thermogenic activity.

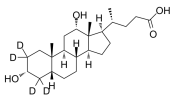


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Deoxycholic acid-d4

Cat. No.: HY-N0593S

Deoxycholic acid-d4 is the deuterium labeled Deoxycholic acid. Deoxycholic acid is specifically responsible for activating the G protein-coupled bile acid receptor **TGR5** that stimulates brown adipose tissue (BAT) thermogenic activity.

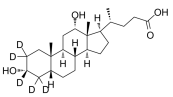


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

Deoxycholic acid-d5

Cat. No.: HY-N0593S1

Deoxycholic acid-d5 is the deuterium labeled Deoxycholic acid. Deoxycholic acid is specifically responsible for activating the G protein-coupled bile acid receptor **TGR5** that stimulates brown adipose tissue (BAT) thermogenic activity.



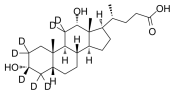
Purity: >98%
Clinical Data: No Development Reported
Size: 2.5 mg, 25 mg

Deoxycholic acid-d6

(Cholanoic Acid-d6; Desoxycholic acid-d6)

Cat. No.: HY-N0593S2

Deoxycholic acid-d6 (Cholanoic Acid-d6) is the deuterium labeled Deoxycholic acid. Deoxycholic acid is specifically responsible for activating the G protein-coupled bile acid receptor **TGR5** that stimulates brown adipose tissue (BAT) thermogenic activity.

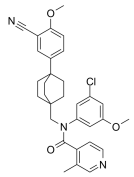


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

FXR/TGR5 agonist 1

Cat. No.: HY-142159

FXR/TGR5 agonist 1 has agonist action on **FXR** and **TGR5**, and can be used for the treatment of fatty liver disease.

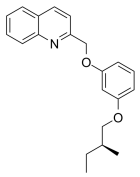


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

GPBAR1-IN-3

Cat. No.: HY-145234

GPBAR1-IN-3 (Compound 14) is a selective **GPBAR1** agonist (EC_{50}=0.17 μM) and a $CysLT_1R$ antagonist.



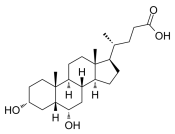
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Hyodeoxycholic acid

(HDCA)

Cat. No.: HY-N0169

Hyodeoxycholic acid is a secondary bile acid formed in the small intestine by the gut flora, and acts as a **TGR5 (GPCR19)** agonist, with an EC_{50} of 31.6 μM in CHO cells.



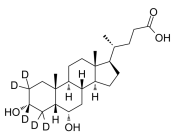
Purity: ≥99.0%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg

Hyodeoxycholic acid-d5

(HDCA-d5)

Cat. No.: HY-N0169S

Hyodeoxycholic acid-d5 (HDCA-d5) is the deuterium labeled Hyodeoxycholic acid. Hyodeoxycholic acid is a secondary bile acid formed in the small intestine by the gut flora, and acts as a **TGR5 (GPCR19)** agonist, with an EC_{50} of 31.6 μM in CHO cells.

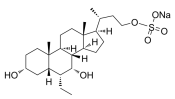


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

INT-767

Cat. No.: HY-12434

INT-767 is a dual **farnesoid X receptor (FXR)/TGR5** agonist with mean EC_{50}s of 30 and 630 nM, respectively.



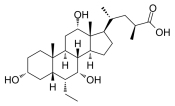
Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

INT-777

(S-EMCA)

Cat. No.: HY-15677

INT-777 is a potent **TGR5** agonist with an EC_{50} of 0.82 μM.



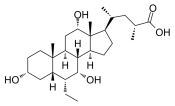
Purity: 100.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

INT-777 R-enantiomer

(S-EMCA R enantiomer)

Cat. No.: HY-15677A

INT-777 (R-enantiomer) is the R-enantiomer of INT-777, with EC_{50} of 4.79 μM for TGR5, and less potent than INT-777.



Purity: ≥95.0%
Clinical Data: No Development Reported
Size: 2 mg, 5 mg

PEN (human)

Cat. No.: HY-P2278

PEN (human), one of the most abundant hypothalamic neuropeptide and derived from the proprotein ProSAAS, is an endogenous ligand of GPR83.

AVDQDLGPEVPPENVLGALLRV

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

PEN (rat)

Cat. No.: HY-P2277

PEN (rat), one of the most abundant hypothalamic neuropeptide and derived from the proprotein ProSAAS, is an endogenous ligand of GPR83.

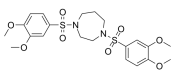
AVDQDLGPEVPPENVLGALLRV

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

SB756050

Cat. No.: HY-102016

SB756050 is a selective **TGR5** agonist. SB756050 has the potential for type 2 diabetes treatment.

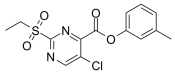


Purity: 99.32%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg

SBI-115

Cat. No.: HY-111534

SBI-115 is a **TGR5 (GPCR19)** antagonist. SBI-115 decreases hepatic cystogenesis with polycystic liver diseases via inhibiting TGR5.

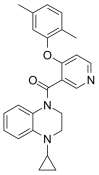


Purity: 99.57%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

TC-G 1005

Cat. No.: HY-110173

TC-G 1005 is a potent, selective and orally active agonist of the **BA receptor Takeda G protein-coupled receptor 5 (TGR5)**, with EC_{50}s of 0.72 and 6.2 nM for hTGR5 and mTGR5, respectively. TC-G 1005 can reduce glucose levels in vivo.



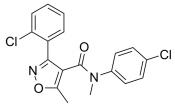
Purity: 99.91%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

TGR5 Receptor Agonist

(CCDC)

Cat. No.: HY-14229

TGR5 Receptor Agonist (CCDC), a potent **TGR5(GPCR19)** agonist, shows improved potency in the U2-OS cell assay (pEC_{50}=6.8) and in melanophore cells (pEC_{50}=7.5).

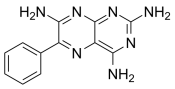


Purity: 99.86%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Triamterene

Cat. No.: HY-B0575

Triamterene blocks epithelial Na+ channel (ENaC) in a voltage-dependent manner, which used as a mild diuretic. Triamterene as an inhibitor of the TGR5 receptor.



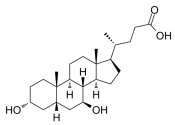
Purity: 99.98%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 500 mg

Ursodeoxycholic acid

(Ursodeoxycholate; Ursodiol; UDCA)

Cat. No.: HY-13771

Ursodeoxycholic acid (Ursodeoxycholate) is a secondary bile acid issued from the transformation of (cheno)deoxycholic acid by intestinal bacteria, acting as a key regulator of the intestinal barrier integrity and essential for lipid metabolism.



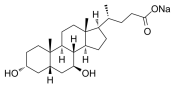
Purity: ≥98.0%
Clinical Data: Launched
Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g

Ursodeoxycholic acid sodium

(Ursodeoxycholate sodium; Ursodiol sodium; UCDA sodium)

Cat. No.: HY-13771A

Ursodeoxycholic acid (Ursodeoxycholate) sodium is a secondary bile acid issued from the transformation of (cheno)deoxycholic acid by intestinal bacteria, acting as a key regulator of the intestinal barrier integrity and essential for lipid metabolism.



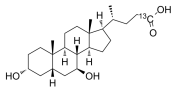
Purity: >98%
Clinical Data: Launched
Size: 500 mg, 1 g, 5 g

Ursodeoxycholic acid-13C

(Ursodeoxycholate-13C; Ursodiol-13C; UDCA-13C)

Cat. No.: HY-13771S1

Ursodeoxycholic acid-13C is the 13C labeled Ursodeoxycholic acid.



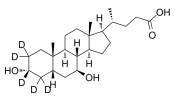
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Ursodeoxycholic acid-d5

(Ursodiol-d5; UDCA-d5)

Cat. No.: HY-13771S

Ursodeoxycholic acid-d5 (Ursodiol-d5) is the deuterium labeled Ursodeoxycholic acid.



Purity: >98%
Clinical Data: No Development Reported
Size: 2.5 mg, 1 mg, 5 mg, 10 mg