5 alpha Reductase

5α-reductase

Steroid 5-α reductase (5AR) is a membrane-bound protein that is responsible for reducing steroids such as testosterone, progesterone, and androstenedione to 5-α reduced metabolites such as 5-α dihydrotestosterone (DHT), 5-α dihydroprogesterone and androstanedione, respectively. There are three isoforms of 5AR in humans: SRD5A1, SRD5A2, and SRD5A3. SRD5A1 and SRD5A2 have functionality for 5-α reduction of steroids in humans. DHT is a more potent androgen than testosterone and has a function in androgen receptor activation.

The inactivating mutations in 5αR2 lead to disorders of sexual development. The regulation of 5AR is important for the treatment of benign prostate hyperplasia (BPH) and prostate cancer (PC), and 5AR inhibitors are widely used for the treatment of androgen-dependent benign or malignant prostatic diseases.

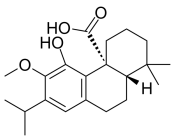
5 alpha Reductase Inhibitors

12-O-Methylcarnosic acid

(12-Methoxycarnosic acid)

Cat. No.: HY-N7510

12-O-Methylcarnosic acid (12-Methoxycarnosic acid), a diterpene carnosic acid isolated from the acetone extract of Salvia microphylla, is an active constituent of **5α-reductase** inhibition with an IC_{50} value of 61.7 μM.

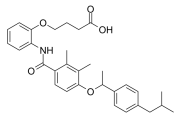


Purity: 99.72%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

5α-reductase-IN-1

Cat. No.: HY-U00376

5α-reductase-IN-1 is an inhibitor of **5α-reductase**, used for the research of patterned alopecia in combination with minoxidil.



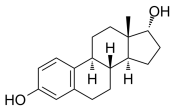
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Alpha-Estradiol

(Alfatradiol; Epiestradiol; Epiestrol)

Cat. No.: HY-B0141A

Alpha-Estradiol is a weak estrogen and a **5α-reductase** inhibitor which is used as a topical medication in the treatment of androgenic alopecia.



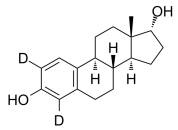
Purity: 99.77%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 500 mg

Alpha-Estradiol-d2

(Alfatradiol-d2; Epiestradiol-d2; Epiestrol-d2)

Cat. No.: HY-B0141AS1

Alpha-Estradiol-d2 is the deuterium labeled Alpha-Estradiol. Alpha-Estradiol is a weak estrogen and a 5α-reductase inhibitor which is used as a topical medication in the treatment of androgenic alopecia.

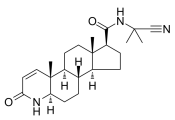


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

CGP-53153

Cat. No.: HY-U00125

CGP-53153 is a steroidal inhibitor of **5 alpha reductase** with IC_{50}s of 36 and 262 nM in rat and human prostatic tissue, respectively.



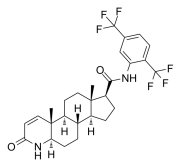
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Dutasteride

(GG 745; GI 198745)

Cat. No.: HY-13613

Dutasteride (GG745) is a potent inhibitor of both **5α-reductase isozymes**. Dutasteride may possess off-target effects on the androgen receptor (AR) due to its structural similarity to DHT.



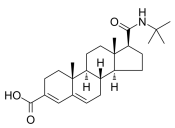
Purity: 99.75%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Epristeride

(ONO-9302; SKF105657)

Cat. No.: HY-107385

Epristeride is a novel **5α-reductase** inhibor.



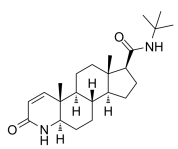
Purity: 99.96%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

Finasteride

(MK-906)

Cat. No.: HY-13635

Finasteride (MK-906) is a potent and competitive **5α-reductase** inhibitor, with an IC_{50} of 4.2 nM for type II 5α-reductase. Finasteride has approximately a 100-fold greater affinity for type II 5α-reductase enzyme than for the type I enzyme.



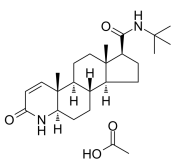
Purity: 99.97%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 200 mg

Finasteride acetate

(MK-906 acetate)

Cat. No.: HY-13635A

Finasteride (MK-906) acetate is a potent and competitive **5α-reductase** inhibitor, with an IC_{50} of 4.2 nM for type II 5α-reductase. Finasteride acetate has approximately a 100-fold greater affinity for type II 5α-reductase enzyme than for the type I enzyme.



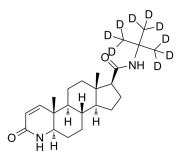
Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

Finasteride-d9

(MK-906-d9)

Cat. No.: HY-13635S

Finasteride-d9 is deuterium labeled Finasteride. Finasteride (MK-906) is a potent and competitive 5α-reductase inhibitor, with an IC50 of 4.2 nM for type II 5α-reductase.



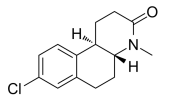
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

LY191704

Cat. No.: HY-118091

LY191704, as a benzoquinolinone, is a potent, nonsteroidal, noncompetitive and selective **human type I 5α-reductase** inhibitor. LY191704 is a racemic mixture of the compounds LY300502 and LY300503.



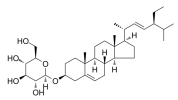
Relative stereochemistry

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

Stigmasterol glucoside

Cat. No.: HY-N1200

Stigmasterol glucoside is a sterol isolated from P. urinaria with high antioxidant and anti-inflammatory activities, act as an inhibitor of **5α-reductase** with an $\mathbf{IC_{50}}$ of 27.2μM.



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