Fatty Acid Synthase (FASN)

Fatty Acid Synthase (FASN) is a multifunctional homodimeric enzyme protein, and it is the major enzyme required for the anabolic conversion of dietary carbohydrates to fatty acids. Fatty acid synthase catalyzes the conversion of acetyl-CoA and malonyl-CoA, in the presence of NADPH, into long-chain saturated fatty acids.

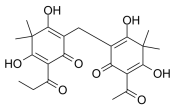
Human fatty acid synthase is a large homodimeric multifunctional enzyme that synthesizes palmitic acid. The unique carboxyl terminal thioesterase domain of fatty acid synthase hydrolyzes the growing fatty acid chain and plays a critical role in regulating the chain length of fatty acid released. Also, the up-regulation of human fatty acid synthase in a variety of cancer makes the thioesterase a candidate target for therapeutic treatment.

Fatty Acid Synthase (FASN) Inhibitors & Modulators

Albaspidin AP

Cat. No.: HY-N0200

Albaspidin AP inhibits fatty acid synthase (**FAS**) with an IC_{50} value of 71.7 μM. Fatty acid synthase (FAS) is emerging as a potential therapeutic target for cancer and obesity.



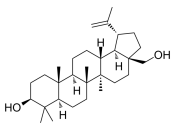
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Betulin

(Trochol)

Cat. No.: HY-N0083

Betulin (Trochol), is a sterol regulatory element-binding protein (**SREBP**) inhibitor with an IC_{50} of 14.5 μM in K562 cell line.

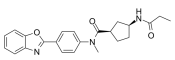


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 50 mg, 100 mg, 200 mg

BI 99179

Cat. No.: HY-16100

BI 99179 is a potent and selective type I fatty acid synthase (**FAS**) inhibitor with an IC_{50} of 79 nM. BI 99179 is a tool compound suitable for the in vivo validation of FAS as a target for lipid metabolism related diseases.

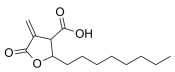


Purity: 99.78%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

C75

Cat. No.: HY-12364

C75 is a synthetic fatty-acid synthase (**FASN**) inhibitor; inhibits prostate cancer cells PC3 with an IC_{50} of 35 μM. C75 is a potent **CPT1A** activator.

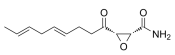


Purity: 99.91%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Cerulenin

Cat. No.: HY-A0210

Cerulenin, a potent, natural inhibitor of fatty acid synthase (**FASN**), is an epoxide produced by the fungus Cephalosporium caeruleus. Cerulenin inhibits topoisomerase I catalytic activity and augments SN-38-induced apoptosis. Cerulenin has antifungal and antitumor activies.



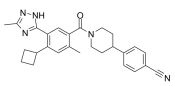
Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg

Denifanstat

(TVB-2640; FASN-IN-2; ASC-40)

Cat. No.: HY-112829

Denifanstat (TVB-2640) is an orally active and potent **Fatty Acid Synthase (FASN)** inhibitor with an IC_{50} of 0.052 μM and an EC_{50} of 0.072 μM. Denifanstat has the potential for fatty liver disease and cancer research.

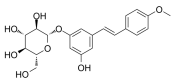


Purity: 99.69%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Desoxyrhaponticin

Cat. No.: HY-N2486

Desoxyrhaponticin is a stilbene glycoside from the Tibetan nutritional food Rheum tanguticum Maxim. Desoxyrhaponticin is a **Fatty acid synthase (FASN)** inhibitor, and has apoptotic effect on human cancer cells.

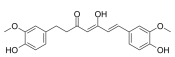


Purity: 99.80%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

Dihydrocurcumin

Cat. No.: HY-N1967

Dihydrocurcumin, a major metabolites of curcumin, reduces lipid accumulation and oxidative stress.

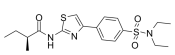


Purity: 99.77%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

FASN-IN-1

Cat. No.: HY-111777

FASN-IN-1 is a **fatty acid synthase (FASN)** inhibitor extracted from patent WO2015134790A1, compound 56.

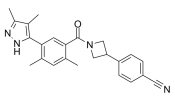


Purity: 99.62%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

FASN-IN-3

Cat. No.: HY-U00436

FASN-IN-3 is a **fatty acid synthase (FASN)** inhibitor extracted from patent US20170119786A1, compound 242A.

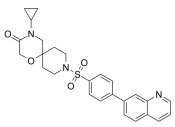


Purity: 98.17%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

FASN-IN-4

Cat. No.: HY-12648

FASN-IN-4 is a potent inhibitor of fatty acid synthase (**FASN**) with an IC_{50} of 10 nM (WO2012064642A1, compound 29). FASN-IN-4 also inhibits **SARS-CoV-2** with an EC_{50} of 18.6nM.

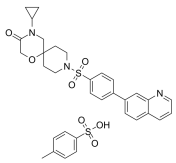


Purity: 99.21%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg

FASN-IN-4 tosylate

Cat. No.: HY-12648A

FASN-IN-4 tosylate is a potent inhibitor of fatty acid synthase (**FASN**) with an IC_{50} of 10 nM (WO2012064642A1, compound 29). FASN-IN-4 tosylate also inhibits **SARS-CoV-2** with an EC_{50} of 18.6nM.

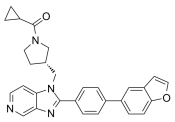


Purity: 98.63%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg

FASN-IN-5

Cat. No.: HY-145809

FASN-IN-5 (example 11), a **FASN** inhibitor, can be used for the research of TH17- or CSF1 -mediated disease or disorder such as cancer, immunological disorders, and obesity.



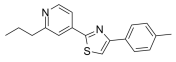
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Fatostatin

(125B11)

Cat. No.: HY-14452

Fatostatin (125B11), a specific inhibitor of **SREBP activation**, impairs the activation of SREBP-1 and SREBP-2. Fatostatin binds to SCAP (SREBP cleavage-activating protein), and inhibits the ER-Golgi translocation of SREBPs.



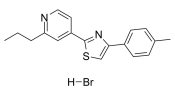
Purity: 98.20%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Fatostatin hydrobromide

(125B11 hydrobromide)

Cat. No.: HY-14452A

Fatostatin hydrobromide (125B11 hydrobromide), a specific inhibitor of **SREBP activation**, impairs the activation of SREBP-1 and SREBP-2. Fatostatin hydrobromide binds to SCAP (SREBP cleavage-activating protein), and inhibits the ER-Golgi translocation of SREBPs.

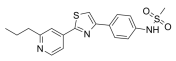


Purity: 99.61%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

FGH10019

Cat. No.: HY-16207

FGH10019 is a novel sterol regulatory element-binding protein (**SREBP**) inhibitor with IC_{50} of 1 μM.

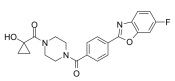


Purity: 99.43%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

FT113

Cat. No.: HY-111551

FT113 is a potent and orally active **fatty acid synthase (FASN)** inhibitor, with an IC_{50} of 213 nM for full-length recombinant human FASN enzyme. In cell-based assay, FT113 blocks FASN activity in BT474 cells (IC_{50}, 90 nM).

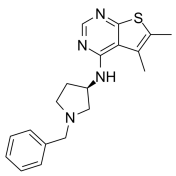


Purity: 99.61%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

HS79

Cat. No.: HY-112522

HS-79 is an enantiomer of Fasnall, which is a selective fatty acid synthase (FASN) inhibitor. HS-79 is able to inhibit the incorporation of tritiated acetate into lipids with an IC_{50} of 1.57 μM.

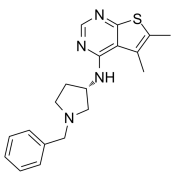


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

HS80

Cat. No.: HY-112522A

HS-80 is an enantiomer of Fasnall, which is a selective fatty acid synthase (FASN) inhibitor. HS-80 is able to inhibit the incorporation of tritiated acetate into lipids with an IC_{50} of 7.13 μM.

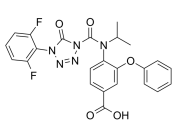


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

IPI-9119

Cat. No.: HY-124628

IPI-9119 is an orally active, selective and irreversible **FASN** inhibitor with an IC_{50} of 0.3 nM in vitro biochemical assay. IPI-9119 inhibits tumor growth of castration-resistant prostate cancer (CRPC) xenografts mouse models.

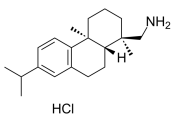


Purity: 98.13%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Leelamine hydrochloride

Cat. No.: HY-110028

Leelamine hydrochloride is a tricyclic diterpene molecule that is extracted from the bark of pine trees.

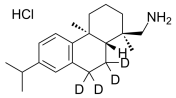


Purity: >98%
Clinical Data:
Size: 5 mg

Leelamine-d4 hydrochloride

Cat. No.: HY-110028S

Leelamine-d4 hydrochloride is the deuterium labeled Leelamine hydrochloride. Leelamine hydrochloride is a tricyclic diterpene molecule that is extracted from the bark of pine trees.

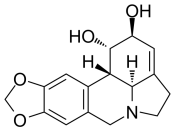


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Lycorine

Cat. No.: HY-N0288

Lycorine is a natural alkaloid extracted from the Amaryllidaceae plant. Lycorine is a potent and orally active **SCAP** inhibitor with a K_d value 15.24 nM. Lycorine downregulates the SCAP protein level without changing its transcription.



Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 50 mg, 100 mg

Nicodicosapent

Cat. No.: HY-17640

Nicodicosapent is a fatty acid niacin conjugate that is also an inhibitor of the sterol regulatory element binding protein **(SREBP)**, a key regulator of cholesterol metabolism proteins such as PCSK9, HMG-CoA reductase, ATP citrate lyase, and NPC1L1.

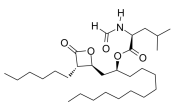
Purity: 98.04%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

Orlistat

(Tetrahydrolipstatin; Ro-18-0647)

Cat. No.: HY-B0218

Orlistat (Tetrahydrolipstatin) is a well-known irreversible inhibitor of pancreatic and gastric **lipases**. Orlistat is also an inhibitor of fatty acid synthase (**FASN**), is used orally for long-term research of obesity. Anti-atherosclerotic effect.

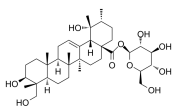


Purity: 98.88%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 200 mg, 500 mg

Pedunculoside

Cat. No.: HY-N0458

Pedunculoside exerts lipid-lowering effects partly through the regulation of lipogenesis and fatty acid β-oxidation.

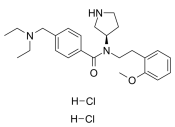


Purity: 99.17%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 20 mg

PF429242 dihydrochloride

Cat. No.: HY-13447A

PF429242 dihydrochloride is a reversible and competitive **SREBP** site 1 protease (**S1P**) inhibitor with an IC_{50} of 175 nM.



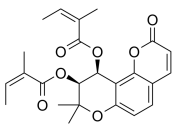
Purity: 99.32%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Praeruptorin B

(Praeruptorin D)

Cat. No.: HY-N0082

Praeruptorin B is an inhibitor of sterol regulatory element-binding proteins **(SREBPs)**.

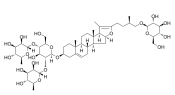


Purity: 99.95%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Pseudoprotodioscin

Cat. No.: HY-N0686

Pseudoprotodioscin, a furostanoside, inhibits SREBP1/2 and microRNA 33a/b levels and reduces the gene expression regarding the synthesis of cholesterol and triglycerides.



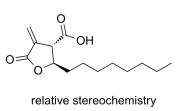
Purity: 98.76%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 20 mg

trans-C75

((±)-C75)

Cat. No.: HY-12364A

trans-C75 ((±)-C75) is an enantiomer of C75. C75 is a synthetic fatty-acid synthase (**FASN**) inhibitor.



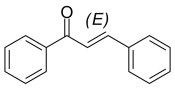
Purity: 99.91%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

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

trans-Chalcone

Cat. No.: HY-Y0598

trans-Chalcone, isolated from Aronia melanocarpa skin, is a biphenolic core structure of flavonoids precursor. trans-Chalcone is a potent **fatty acid synthase (FAS)** and **α-amylase** inhibitor.

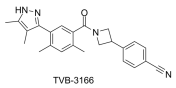


Purity: 98.07%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 500 mg

TVB-3166

Cat. No.: HY-120394

TVB-3166 is an orally-available, reversible, and selective **fatty acid synthase (FASN)** inhibitor with IC_{50}s of 42 nM and 81 nM for biochemical FASN and cellular palmitate synthesis, respectively. TVB-3166 induces **apoptosis**, and inhibits in-vivo xenograft tumor growth.

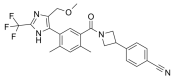


Purity: 99.76%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

TVB-3664

Cat. No.: HY-120062

TVB-3664 is an orally available, reversible, potent, selective and highly bioavailable **fatty acid synthase (FASN)** inhibitor, with IC_{50} values of 18 nM and 12 nM for human and mouse cell palmitate synthesis, respectively.



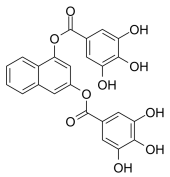
Purity: 99.66%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

UCM05

(G28UCM)

Cat. No.: HY-110354

UCM05 (G28UCM) is a potent inhibitor of **fatty acid synthase** (**FASN**) shows activity against HER2+ breast cancer xenografts and is active in anti-HER2 drug-resistant cell lines.



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