PGE synthase

Prostaglandin E synthase

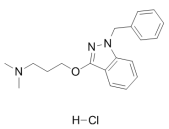
PGE synthase (Prostaglandin E synthase), which converts cyclooxygenase (COX)-derived prostaglandin (PG) H2 to PGE2, occurs in multiple forms with distinct enzymatic properties, modes of expression, cellular and subcellular localizations and intracellular functions. Cytosolic PGES (cPGES) is a cytosolic protein that is constitutively expressed in a wide variety of cells and tissues and is associated with heat shock protein 90 (Hsp90). Membrane-associated PGES (mPGES), the expression of which is stimulus-inducible and is downregulated by anti-inflammatory glucocorticoids, is a perinuclear protein belonging to the microsomal glutathione S-transferase (GST) family. These two PGESs display distinct functional coupling with upstream COXs in cells; cPGES is predominantly coupled with the constitutive COX-1, whereas mPGES is preferentially linked with the inducible COX-2. Several cytosolic GSTs also have the capacity to convert PGH2 to PGE2 in vitro. Accumulating evidence has suggested that mPGES participates in various pathophysiological states in which COX-2 is involved, implying that mPGES represents a potential novel target for drug development.

PGE synthase Inhibitors & Agonists

Benzydamine hydrochloride

Cat. No.: HY-30235A

Benzydamine hydrochloride is a locally-acting nonsteroidal anti-inflammatory drug with local anaesthetic and analgesic properties; selectively binds to prostaglandin synthetase and has notable in vitro antibacterial activity.



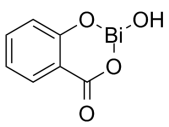
Purity: 98.79%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg

Bismuth Subsalicylate

(Bismuth oxysalicylate; Bismuth(III) salicylate basic)

Cat. No.: HY-B0550

Bismuth Subsalicylate is the active ingredient in Pepto-Bismol and inhibits prostaglandin G/H Synthase 1/2. Target: Others Bismuth Subsalicylate reduces inflammation/irritation of stomach and intestinal lining through inhibition of prostaglandin G/H Synthase 1/2 .

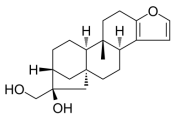


Purity: >98%
Clinical Data: Launched
Size: 5 g, 10 g

Cafestol

Cat. No.: HY-N6257

Cafestol, one of the major components of coffee, is a coffee-specific diterpene from. Cafestol is a **ERK** inhibitor for AP-1-targeted activity against **PGE_2** production and the mRNA expression of **cyclooxygenase (COX)-2** in LPS-activated RAW264.7 cells.

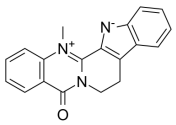


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Dehydroevodiamine

Cat. No.: HY-N2106

Dehydroevodiamine is a major bioactive quinazoline alkaloid isolated from Evodiae Fructus, has an antiarrhythmic effect in guinea-pig ventricular myocytes.



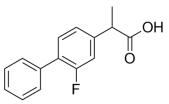
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Flurbiprofen

(dl-Flurbiprofen)

Cat. No.: HY-10582

Flurbiprofen is a nonsteroidal anti-inflammatory agent (NSAIA) with antipyretic and analgesic activity. Target: PGE synthase Flurbiprofen, a propionic acid derivative, is a nonsteroidal anti-inflammatory agent (NSAIA) with antipyretic and analgesic activity.

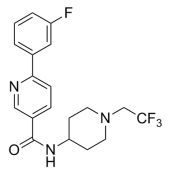


Purity: 99.85%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 500 mg

HPGDS inhibitor 1

Cat. No.: HY-10439

HPGDS inhibitor 1 is a novel and selective Hematopoietic Prostaglandin D Synthase (HPGDS) inhibitor with an IC50 Value of 0.7 nM.

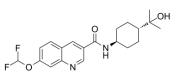


Purity: 99.32%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

HPGDS inhibitor 2

Cat. No.: HY-126134

HPGDS inhibitor 2 is a highly potent and selective **hematopoietic prostaglandin D synthase (H-PGDS)** inhibitor with an **IC_{50}** of 9.9 nM.

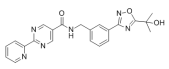


Purity: >98%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

hPGDS-IN-1

Cat. No.: HY-12791

hPGDS-IN-1 is a hPGDS inhibitor ,with IC50 of 12 nM in the Fluorescence Polarization Assay or the EIA assay. IC50 value: 12 nM Target: hPGDS The detailed information please refer to WO2011044307A1 and WO2010080563A2.

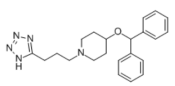


Purity: 99.82%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

HQL-79

Cat. No.: HY-108259

HQL-79 is a potent, selective and orally active human **hematopoietic prostaglandin D synthase (H-PGDS)** inhibitor, highly selectively inhibits the synthesis of PGD_2, and acts as an anti-allergic agent, with a **K_d** of 0.8 μM and an **IC_{50}** of 6 μM.



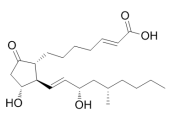
Purity: >99.0%
Clinical Data: No Development Reported
Size: 5 mg

Limaprost

(17α,20-dimethyl-δ2-PGE1; ONO1206; OP1206)

Cat. No.: HY-B0683

Limaprost(OP1206) is a PGE1 analog and potent platelet adhesion inhibitor.

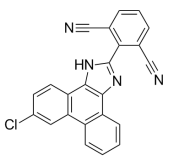


Purity: 99.95%
Clinical Data: Launched
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg

MF63

Cat. No.: HY-13283

MF63 is a selective mPGES-1 inhibitor with an IC50 of 0.9 nM and 1.3 nM for pig mPGES-1 and human mPGES-1 enzyme, respectively.

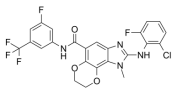


Purity: 98.94%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

mPGES1-IN-3

Cat. No.: HY-100864

mPGES1-IN-3 (Compound 17d) is a potent and selective microsomal prostaglandin E2 synthase-1 (**mPGES-1**) inhibitor, which exhibits excellent mPGES-1 enzyme (IC_{50}: 8 nM), cell (A549 IC_{50}: 16.24 nM) and human whole blood potency (IC_{50}: 249.9 nM).



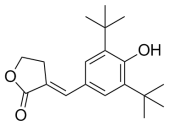
Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

PGS-IN-1

(KME-4)

Cat. No.: HY-101587

PGS-IN-1 is a potent inhibitor of **prostaglandin synthetase** (PGS) with an IC_{50} of 0.28 μM; also inhibits **5-lipoxygenase** with an IC_{50} of 1.05 μM.

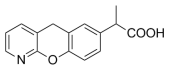


Purity: 99.51%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

Pranoprofen

Cat. No.: HY-B0336

Pranoprofen is a non-steroidal anti-inflammatory drug used in ophthalmology.



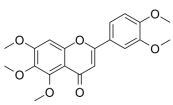
Purity: 98.48%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 500 mg

Sinensetin

(Pedalitin permethyl ether)

Cat. No.: HY-N0297

Sinensetin is a methylated flavone found in certain citrus fruits. pocess potent antiangiogenesis and anti-inflammatory, sinensetin enhances adipogenesis and lipolysis.



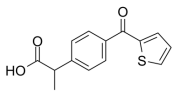
Purity: 99.34%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

Suprofen

(TN-762)

Cat. No.: HY-B0270

Suprofen (TN-762) is a non-steroidal anti-inflammatory drug (NSAID).



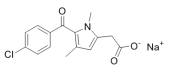
Purity: 99.44%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Zomepirac sodium salt

(McN-2783-21-98)

Cat. No.: HY-B0890

Zomepirac sodium salt is a pyrrole-acetic acid structurally related to tolmetin sodium; a prostaglandin synthetase inhibitor.



Purity: 99.45%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 100 mg, 500 mg