Xanthine Oxidase

XO

Xanthine oxidase (XO), a versatile molybdoflavoprotein, catalyzes the oxidative hydroxylation of purine substrates (hypoxanthine and xanthine) to produce uric acid and subsequent reduction of oxygen at the flavin center with the generation of reactive oxygen species, either superoxide anion radical or hydrogen peroxide.

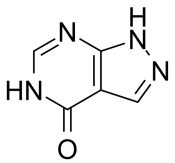
Xanthine oxidase is an important enzyme of purine catabolism pathway and has been associated directly in pathogenesis of gout and indirectly in many pathological conditions like cancer, diabetes and metabolic syndrome. The selective inhibition of xanthine oxidase may result in a broad spectrum therapeutic use for gout, cancer, inflammation and oxidative damage.

Xanthine Oxidase Inhibitors

Allopurinol

Cat. No.: HY-B0219

Allopurinol is a potent **xanthine oxidase** inhibitor (IC_{50} values of 0.2 to 50 μM). Allopurinol can be used for the research of hyperuricemia and gout. Antileishmanial effect.

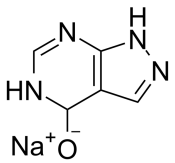


Purity: 99.92%
Clinical Data: Launched
Size: 10 mM × 1 mL, 500 mg, 5 g, 10 g

Allopurinol sodium

Cat. No.: HY-B0219A

Allopurinol sodium is a potent **xanthine oxidase** inhibitor (IC_{50} values of 0.2 to 50 μM). Allopurinol sodium can be used for the research of hyperuricemia and gout. Antileishmanial effect.

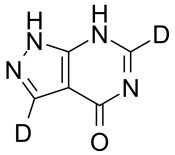


Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

Allopurinol-d2

Cat. No.: HY-B0219S

Allopurinol-d2 is deuterium labeled Allopurinol. Allopurinol is a potent xanthine oxidase inhibitor (IC50 values of 0.2 to 50 μM). Allopurinol can be used for the research of hyperuricemia and gout. Antileishmanial effect.



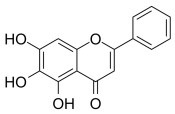
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Baicalein

(5,6,7-Trihydroxyflavone)

Cat. No.: HY-N0196

Baicalein (5,6,7-Trihydroxyflavone) is a **xanthine oxidase** inhibitor with an IC_{50} value of 3.12 μM.

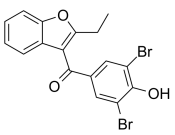


Purity: 99.13%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg

Benzbromarone

Cat. No.: HY-B1135

Benzbromarone is a highly effective and well tolerated non-competitive inhibitor of xanthine oxidase, used as an uricosuric agent, used in the treatment of gout.

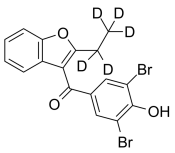


Purity: 99.80%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg

Benzbromarone-d5

Cat. No.: HY-B1135S

Benzbromarone-d5 is deuterium labeled Benzbromarone.

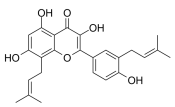


Purity: >98%
Clinical Data:
Size: 1 mg, 5 mg

Broussoflavonol F

Cat. No.: HY-N9330

Broussoflavonol F possess **xanthine oxidase** inhibitory activity.



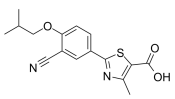
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Febuxostat

(TEI 6720; TMX 67)

Cat. No.: HY-14268

Febuxostat (TEI 6720) is selective **xanthine oxidase** inhibitor with a K_i of 0.6 nM.

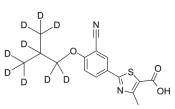


Purity: 99.90%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Febuxostat D9

Cat. No.: HY-14268S

Febuxostat D9 is deuterium labeled Febuxostat, which is a selective xanthine oxidase inhibitor with a K_i of 0.6 nM.



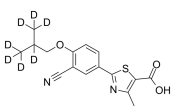
Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Febuxostat-d7

(TEI 6720-d7; TMX 67-d7)

Cat. No.: HY-14268S1

Febuxostat-d7 is deuterium labeled Febuxostat. Febuxostat (TEI 6720) is selective xanthine oxidase inhibitor with a Ki of 0.6 nM.

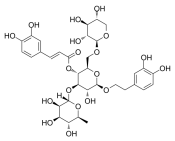


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Forsythoside F
(Arenarioside)

Cat. No.: HY-N7397

Forsythoside F (Arenarioside) is a **xanthine oxidase** inhibitor and possesses antihyperuricemic effects in vivo.

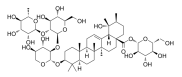


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Ilexoside O

Cat. No.: HY-N9324

Ilexoside O is a triterpene saponin isolated from the roots of Ilex pubescens. Ilexoside O exhibits weak **xanthine oxidase (XOD)** inhibitory activity (IC_{50}=53.05 μM).

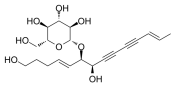


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Lobetyolin

Cat. No.: HY-N0327

Lobetyolin, a bioactive compound, is derived from Codonopsis pilosula. Lobetyolin has anti-inflammatory, anti-oxidative and **xanthine oxidase** inhibiting activities. Lobetyolin also induces the apoptosis via the inhibition of **ASCT2**-mediated glutamine metabolism.

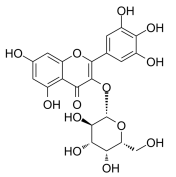


Purity: 99.89%
Clinical Data: No Development Reported
Size: 5 mg

Myricetin 3-O-galactoside

Cat. No.: HY-N3220

Myricetin 3-O-galactoside inhibits **xanthine oxidase (XO)** activity, lipid peroxidation and scavenges the free radical. Myricetin 3-O-galactoside inhibits lipid peroxidation with an IC_{50} of 160 μg/mL. Antioxidant activity.

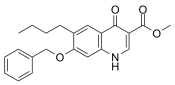


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Nequinate

Cat. No.: HY-116433

Nequinate, a quinoline compound, is an anticoccidial agent against cecal coccidiosis (Eimeria tenella) infections. Nequinate inhibits xanthine oxidoreductase (**XOD**) activity.

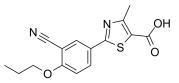


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

O-Desisobutyl-O-n-propyl Febuxostat

Cat. No.: HY-131268

O-Desisobutyl-O-n-propyl Febuxostat, extracted from the patent CN 103467412, is an **xanthine oxidase** inhibitor.

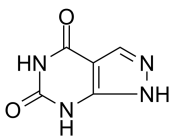


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Oxypurinol
(Oxipurinol)

Cat. No.: HY-19657

Oxipurinol (Oxipurinol), the major active metabolite of Allopurinol, is an inhibitor of **xanthine oxidase**. Oxipurinol can be used to regulate blood urate levels and treat gout.

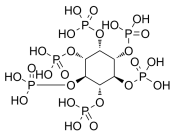


Purity: ≥98.0%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 50 mg

Phytic acid (Inositol hexaphosphate; myo-Inositol, hexakis(dihydrogen phosphate))

Cat. No.: HY-N0814

Phytic acid is a phosphorus storage compound of seeds and cereal grains. Phytic acid is known as a food inhibitor, which has a strong ability to chelate multivalent metal ions, specially zinc, calcium, iron and as with protein residue.

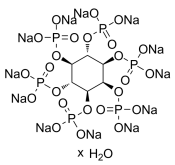


Purity: ≥95.0%
Clinical Data: Launched
Size: 250 mg (757.5 mM * 500 μL in Water) ,

Phytic acid dodecasodium salt hydrate (Inositol hexaphosphate dodecasodium salt hydrate; ...)

Cat. No.: HY-N0814A

Phytic acid dodecasodium salt hydrate is a phosphorus storage compound of seeds and cereal grains.

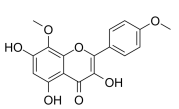


Purity: ≥98.0%
Clinical Data: Phase 3
Size: 250 mg

Prudomestin

Cat. No.: HY-N1547

Prudomestin, isolated from the heartwood of Prunus domestica, shows potent **xanthine oxidase (XO)** inhibitory activity (IC_{50}≈6 μM).

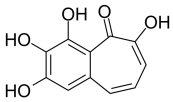


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

Purpurogallin

Cat. No.: HY-12136

Purpurogallin is a naturally phenol extracted from the plants of Quercus spp, has potent **xanthine oxidase (XO)** inhibitory activity with an IC_{50} of 0.2 μM. Purpurogallin has antioxidant and anti-inflammatory effects.



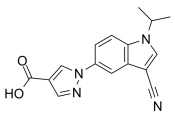
Purity: >98%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Tigulixostat

(LC350189)

Cat. No.: HY-139585

Tigulixostat (LC350189) is an orally active, non-purine selective **xanthine oxidase** inhibitor. Tigulixostat lowers the production of uric acid. Tigulixostat can be used for gout and hyperuricemia study.



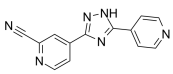
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Topiroxostat

(FYX-051)

Cat. No.: HY-14874

Topiroxostat (FYX-051) is a potent and orally active **xanthine oxidoreductase (XOR)** inhibitor with an IC_{50} value of 5.3 nM and a K_i value of 5.7 nM. Topiroxostat exhibits weak **CYP3A4**-inhibitory activity (18.6%). Topiroxostat has the potential for hyperuricemia treatment.



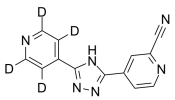
Purity: 99.68%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg

Topiroxostat-d4

(FYX-051-d4)

Cat. No.: HY-14874S

Topiroxostat-d4 is deuterium labeled Topiroxostat. Topiroxostat (FYX-051) is a potent and orally active xanthine oxidoreductase (XOR) inhibitor with an IC50 value of 5.3 nM and a Ki value of 5.7 nM. Topiroxostat exhibits weak CYP3A4-inhibitory activity (18.6%).



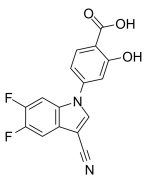
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Xanthine oxidase-IN-1

(4-(3-Cyano-5,6-difluoroindol-1-yl)-2-hydroxybenzoic acid)

Cat. No.: HY-U00288

Xanthine oxidase-IN-1 is a **xanthine oxidase** inhibitor extracted from patent WO2008126898A1, page 68, compound example 3, with an IC_{50} of 6.5 nM.

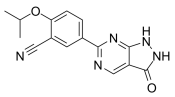


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Xanthine oxidase-IN-4

Cat. No.: HY-144303

Xanthine oxidase-IN-4 (compound 19a) is an orally active and potent **xanthine oxidase (XO)** inhibitor, with an IC_{50} of 0.039 μM. Xanthine oxidase-IN-4 exhibits hypouricemic potency in potassium oxonate induced hyperuricemia rats. Xanthine oxidase-IN-4 can be used for hyperuricemia and gout research.

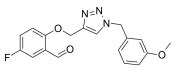


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Xanthine oxidase-IN-5

Cat. No.: HY-144456

Xanthine oxidase-IN-5 is an effective and orally active **xanthine oxidase** (**XO**) inhibitor with IC_{50} value of 0.70 μM.

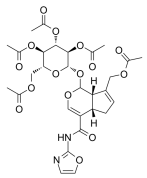


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Xanthine oxidase-IN-6

Cat. No.: HY-146560

Xanthine oxidase-IN-6 (Compound 6c) is a potent, orally active, mixed-type xanthine oxidase (**XOD**) inhibitor with an IC_{50} value of 1.37 μM. Xanthine oxidase-IN-6 shows strong **anti-hyperuricemia** and renal protective activity.

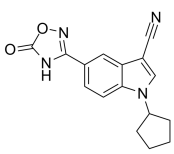


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Xanthine oxidase-IN-7

Cat. No.: HY-146273

Xanthine oxidase-IN-7 (compound1h) is a potent andorally active **XO (xanthine oxidase)** inhibitor with an IC_{50} of 0.36 μM. Xanthine oxidase-IN-7 effectively reduces serum uric acid levels. Xanthine oxidase-IN-7 has the potential for the research of hyperuricemia and gout.



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