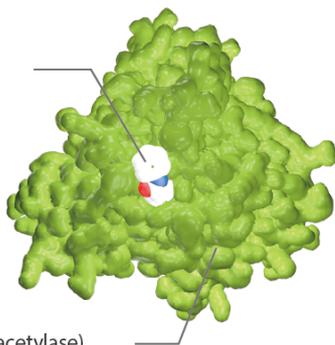


Xanthine Oxidase

XO

HDAC Inhibitor:
Vorinostat (SAHA)

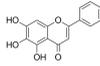
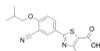


HDAC (Histone deacetylase)

Xanthine oxidase (XO) is an important enzyme catalyzing the hydroxylation of hypoxanthine to xanthine and xanthine to uric acid which is excreted by kidneys. Xanthine oxidase belongs to the molybdenum-protein family containing one molybdenum, one of the flavin adenine dinucleotides (FAD), and two iron-sulfur (2Fe-2S) centers of the ferredoxin type in each of its two independent subunits. The enzyme contains two separated substrate-binding sites. XO catalysed the oxidation of hypoxanthine to xanthine and subsequently to uric acid.

Xanthine oxidase inhibitors (XOIs) are typically used in the treatment of nephropathy and renal stone diseases linked to hyperuricemia.

Xanthine Oxidase Inhibitors & Modulators

<p>Allopurinol</p> <p style="text-align: right;">Cat. No.: HY-B0219</p>	<p>Baicalein (5,6,7-Trihydroxyflavone)</p> <p style="text-align: right;">Cat. No.: HY-N0196</p>
<p>Bioactivity: Allopurinol (Zyloprim) is a xanthine oxidase inhibitor with an IC₅₀ of 7.82±0.12 μM.</p> <p>Purity: 99.0%</p> <p>Clinical Data: Launched</p> <p>Size: 10mM x 1mL in DMSO, 5 g, 10 g</p> 	<p>Bioactivity: Baicalein (5,6,7-Trihydroxyflavone) is a xanthine oxidase inhibitor with an IC₅₀ value of 3.12 mM.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 100 mg</p> 
<p>Benzbromarone</p> <p style="text-align: right;">Cat. No.: HY-B1135</p>	<p>Febuxostat (TEI 6720; TMX 67)</p> <p style="text-align: right;">Cat. No.: HY-14268</p>
<p>Bioactivity: 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.</p> <p>Purity: 99.17%</p> <p>Clinical Data: Launched</p> <p>Size: 10mM x 1mL in DMSO, 100 mg</p> 	<p>Bioactivity: Febuxostat(TEI 6720;TMX 67) is selective xanthine oxidase inhibitor with Ki of 0.6 nM. IC₅₀ value: 0.6 nM (Ki) [1] Target: xanthine oxidase in vitro: Febuxostat displays potent mixed-type inhibition of the activity of purified bovine milk xanthine oxidase, with Ki and Ki' values of 0.6 nM and 3.1 nM...</p> <p>Purity: 99.94%</p> <p>Clinical Data: Launched</p> <p>Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg</p> 
<p>Febuxostat D9</p> <p style="text-align: right;">Cat. No.: HY-14268S</p>	<p>Phytic acid (myo-Inositol, hexakis(dihydrogen phosphate); Inositol hexaphosphate)</p> <p style="text-align: right;">Cat. No.: HY-N0814</p>
<p>Bioactivity: Febuxostat D9 is deuterium labeled Febuxostat, which is a selective xanthine oxidase inhibitor with Ki of 0.6 nM.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 1 mg, 5 mg</p> 	<p>Bioactivity: Phytic acid is a major phosphorus storage compound of most seeds and cereal grains.</p> <p>Purity: 95.0%</p> <p>Clinical Data: Phase 3</p> <p>Size: 10mM x 1mL in Water, 250 mg</p> 
<p>Topiroxostat (FYX-051)</p> <p style="text-align: right;">Cat. No.: HY-14874</p>	<p>Xanthine oxidase-IN-1 (4-(3-Cyano-5,6-difluoroindol-1-yl)-2-hydroxybenzoic acid)</p> <p style="text-align: right;">Cat. No.: HY-U00288</p>
<p>Bioactivity: Topiroxostat(FYX-051) is a novel and potent xanthine oxidoreductase (XOR) inhibitor with IC₅₀ value of 5.3 nM.</p> <p>Purity: 98.54%</p> <p>Clinical Data: Launched</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg</p> 	<p>Bioactivity: Xanthine oxidase-IN-1 is a xanthine oxidase inhibitor extracted from patent WO2008126898A1, page 68, compound example 3, with an IC₅₀ of 6.5 nM.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 500 mg, 250 mg</p> 