Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Topiroxostat

Catalog No: tcsc2033

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Specifications

CAS No:
577778-58-6

Formula:
$C_{13}H_8N_6$

Pathway:
Metabolic Enzyme/Protease

Target:
Xanthine Oxidase

Purity / Grade:
>98%

Solubility:
DMSO : 23.5 mg/mL (94.67 mM; Need ultrasonic and warming)

Alternative Names:
FYX-051

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Observed Molecular Weight:
248.24

Product Description

Topiroxostat(FYX-051) is a novel and potent xanthine oxidoreductase (XOR) inhibitor with IC50 value of 5.3 nM.

IC50 value: 5.3 nM [1]

Target: xanthine oxidoreductase

in vitro: Steady-state kinetics study showed that FYX-051 initially behaved as a competitive-type inhibitor with a K(i) value of 5.7 × 10(-9) M, then after a few minutes it formed a tight complex with XOR via a Mo-oxygen-carbon atom covalent linkage, as reported previously [3].

in vivo: FYX-051 exhibited a weak CYP3A4-inhibitory activity (18.6%); its Cmax and bioavailability were as high as 4.62 μg/mL (3 mg/kg) and 69.6%, respectively. Moreover, the t1/2 value of 39 was greater (19.7 h) than that of compound 2 (0.97 h) [1]. In the mechanistic study by 52-week oral treatment with topiroxostat at 3 mg/kg to F344 male rats, with and without citrate, simple and papillary transitional cell hyperplasias of the urinary bladder epithelium were observed in 5/17 in the topiroxostat-alone treatment group, along with xanthine-induced nephropathy, in contrast to neither xanthine crystals nor lesions in urinary organs by co-treatment group with citrate [2].