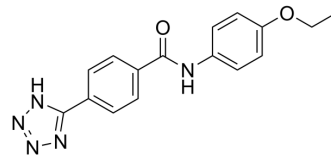


Xanthine oxidoreductase-IN-4

Cat. No.:	HY-151974
CAS No.:	1026587-58-5
Molecular Formula:	C ₁₆ H ₁₅ N ₅ O ₂
Molecular Weight:	309.32
Target:	Xanthine Oxidase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Xanthine oxidoreductase-IN-4 is an orally active xanthine oxidoreductase (XOR) inhibitor. Xanthine oxidoreductase-IN-4 has inhibitory activity against XOR with an IC ₅₀ value of 29.3 nM. Xanthine oxidoreductase-IN-4 can be used for the research of hyperuricemia ^[1] .								
IC₅₀ & Target	IC ₅₀ : 29.3 nM (XOR) ^[1]								
In Vitro	Xanthine oxidoreductase-IN-4 (Compound IIIc) has inhibitory activity against XOR with an IC ₅₀ value of 29.3 nM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	<p>Xanthine oxidoreductase-IN-4 (Compound IIIc) (oral; 5 mg/kg) shows a significant hypouricemia effect in a potassium oxazinate/hypoxanthine-induced model of acute hyperuricemia^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Mice acute hyperuricemia model^[1]</td> </tr> <tr> <td>Dosage:</td> <td>5 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral</td> </tr> <tr> <td>Result:</td> <td>Reduced serum levels of uric acid significantly from 4 h after administration.</td> </tr> </table>	Animal Model:	Mice acute hyperuricemia model ^[1]	Dosage:	5 mg/kg	Administration:	Oral	Result:	Reduced serum levels of uric acid significantly from 4 h after administration.
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Dosage:	5 mg/kg								
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Result:	Reduced serum levels of uric acid significantly from 4 h after administration.								

REFERENCES

[1]. Wen Peng, et al. Design, synthesis, and evaluation of tricyclic compounds containing phenyl-tetrazole as XOR inhibitors. Eur J Med Chem. 2022 Nov 28;246:114947.

Caution: Product has not been fully validated for medical applications. For research use only.

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