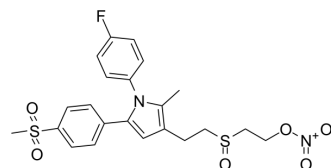


COX-2-IN-29

Cat. No.:	HY-150721
Molecular Formula:	C ₂₂ H ₂₃ FN ₂ O ₆ S ₂
Molecular Weight:	494.56
Target:	COX
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	COX-2-IN-29 (Compound 15b) is a selective and orally active COX-2 inhibitor with an IC ₅₀ of 0.005 μM ^[1] .	
IC₅₀ & Target	COX-2 0.005 μM (IC ₅₀)	COX-1 > 10 μM (IC ₅₀)
In Vitro	COX-2-IN-29 (Compound 15b) shows metabolic stability with intrinsic clearance value of 39.9 and 40.3 μL/min/mg protein in mouse and human liver microsomes, respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	COX-2-IN-29 (Compound 15b) (10 and 20 mg/kg; p.o.; once) shows antinociceptive activity at 20 mg/kg, and shows anti-inflammatory and anti-edema activities ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Male CD1 albino mice (23 – 25 g) or male Sprague–Dawley rats weighing approximately 200 – 250 g ^[1]
	Dosage:	10 and 20 mg/kg
	Administration:	PO, once
	Result:	Induced a reduction of the number of writhes in a statistically significant manner at the minimum dose of 20 mg/kg, while didn't show any antinociceptive efficacy at 10 mg/kg. Showed a good activity against carrageenan-induced hyperalgesia 30 min after administration, disappearing completely at 1 h after treatment. A very good activity was demonstrated against carrageenan induced edema in the rat paw.

REFERENCES

[1]. Saletti M, et al. Novel analgesic/anti-inflammatory agents: 1, 5-Diarylpyrrole nitroxyethyl sulfides and related compounds as Cyclooxygenase-2 inhibitors containing a nitric oxide donor moiety endowed with vasorelaxant properties. *European Journal of Medicinal Chemistry*, 2022: 114615.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA