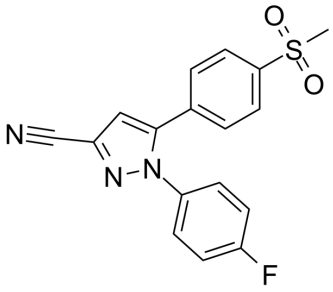
COX-2-IN-2

Cat. No.:	HY-101655
CAS No.:	134729-13-8
Molecular Formula:	$C_{17}H_{12}FN_3O_2S$
Molecular Weight:	341.36
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-2 is a selective and inducible COX2 inhibitor with an IC_{50} of 0.24 μM. COX-2-IN-1 is an anti-inflammatory compound with anti-inflammatory and analgesic activities.
IC_{50} & Target	COX-2 240 nM (IC_{50})
In Vitro	COX-2-IN-2 shows no COX-1 inhibition even at 100μM[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	COX-2-IN-2 has oral ED_{50} values of 0.030 and 0.47mg/kg on adjuvant-induced arthritis and collagen-induced arthritis, respectively, and an ED_{30} value of 7.4mg/kg in the yeast-induced hyperalgesia (Randall-Selitto) assay. COX-2-IN-2 shows good analgesic activity and no ulcerogenicity[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Kinase Assay [1]	hCOX1 or hCOX2 is preincubated with COX2-IN-2 in 0.1 M Tris-HCl buffer containing 2 μM hematin and 5 mM L-tryptophan at 30°C for 5 min, followed by a 5 min incubation with arachidonic acid. The enzyme reaction is stopped by the addition of 1 N HCl. The PGE2 formed is extracted with EtOAc and measured by RIA[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Administration [1]	Rats: Ten male Sprague Dawley rats are used per group. A suspension of 0.5% brewer's yeast in 0.5% methyl cellulose is injected into the right hind paw. The pain threshold us determined 3h after yeast injection. COX-2-IN-2 is given orally 2 h after yeast injection. The pain threshold in the treated rats are compared with that in the control rats[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Tsuji K, et al. Studies on anti-inflammatory agents. IV. Synthesis and pharmacological properties of 1,5-diarylpyrazoles and related derivatives. Chem Pharm Bull (1997),

45(6), 987-995.

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