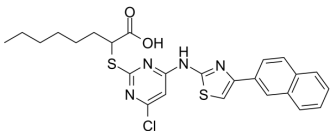
5-LO/mPGES1-IN-1

Cat. No.:	HY-126898
CAS No.:	1492060-44-2
Molecular Formula:	$C_{25}H_{25}ClN_4O_2S_2$
Molecular Weight:	513.07
Target:	Lipoxygenase; PGE synthase
Pathway:	Metabolic Enzyme/Protease; Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	5-LO/mPGES1-IN-1 (Compound 16) is a dual inhibitor of microsomal prostaglandin E2 synthase-1 (mPGES-1) and 5-lipoxygenase (5-LO). IC_{50} values are 0.3 and 0.4 μM, respectively. 5-LO/mPGES1-IN-1 has anti-inflammatory activity[1].
IC_{50} & Target	5-LOX 0.4 μM (IC_{50})
In Vivo	5-LO/mPGES1-IN-1 (10 mg/kg, intraperitoneally injected, pretreated 30 minutes before peritonitis induction) reduces vascular permeability and inflammatory cell infiltration in zymosan-induced mouse peritonitis models. Impaired cysteine-leukotriene and prostaglandin E2 levels[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Zymosan-Induced Peritonitis in Mice[1]
Dosage:	10 mg/kg
Administration:	i.p. pretreated 30 minutes before peritonitis induction
Result:	Reduced vascular permeability by 57% and inhibited neutrophil infiltration by 45%.

REFERENCES

[1]. Hanke T, et al. Aminothiazole-featured pirinixic acid derivatives as dual 5-lipoxygenase and microsomal prostaglandin E2 synthase-1 inhibitors with improved potency and efficiency in vivo. J Med Chem. 2013 Nov 27;56(22):9031-44.

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