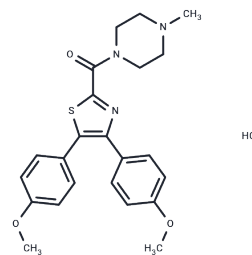


FR 122047

Chemical Properties

CAS No. : 130717-51-0
 Formula: C₂₃H₂₆ClN₃O₃S
 Molecular Weight: 459.99
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	FR 122047 (1-[(4,5-Bis(4-methoxyphenyl)-2-thiazoyl)carbonyl]-4-methylpiperazine, Hydrochloride) is a potent and selective inhibitor of COX-1 with IC ₅₀ of 28 nM and 65 μM for human recombinant COX-1 and COX-2, respectively.
Targets(IC ₅₀)	COX

Solubility Information

Solubility	DMSO: 4 mg/mL (8.7 mM), Sonication is recommended. H ₂ O: 2 mg/mL (4.35 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.17 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.174 mL	10.8698 mL	21.7396 mL
5 mM	0.4348 mL	2.174 mL	4.3479 mL
10 mM	0.2174 mL	1.087 mL	2.174 mL
50 mM	0.0435 mL	0.2174 mL	0.4348 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Restrepo B, García M, López C, Martín ML, San Román L, Morán A. The cyclooxygenase and nitric oxide synthesis/pathways mediate the inhibitory serotonergic response to the pressor effect elicited by sympathetic stimulation in long-term diabetic pithed rats. *Pharmacology*. 2012;90(3-4):169-76.

Sandberg M, Jansson L. Effects of cyclooxygenase inhibition on insulin release and pancreatic islet blood flow in rats. *Ups J Med Sci*. 2014 Nov;119(4):316-23.

Restrepo B, García M, Rodríguez-Barbero A, Román LS, Martín ML, Morán A. Participation of cyclooxygenase pathway in the vasoconstriction induced by 5-HT in the in situ autoperfused kidney of long-term diabetic rats. *Eur J Pharmacol*. 2011 May 20;659(1):37-44.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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