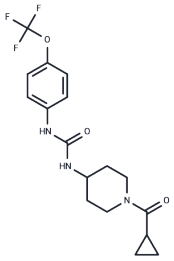
Data Sheet (Cat.No.T38367)

TargetMol

CAY10640

Chemical Properties



CAS No. : 1208549-68-1

Formula: C17H20F3N3O3

Molecular Weight: 371.35

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	CAY10640 (sEH inhibitor-1) is a potent, orally active, water-soluble epoxide hydrolase (sEH) inhibitor that inhibits sEH in humans and mice with IC50s of 0.4 and 5.3 nM, respectively.
Targets(IC50)	Epoxide Hydrolase
In vivo	Oral administration of 13 1-aryl-3-(1-acylpiperidin-4-yl)urea (CAY10640) inhibitors in mice revealed substantial improvements in pharmacokinetic parameters over previously reported 1-adamantylurea based inhibitors. This novel sEH inhibitor showed a 1000-fold increase in potency when compared to morphine by reducing hyperalgesia as measured by mechanical withdrawal threshold using the in vivo carrageenan induced inflammatory pain model.[1]

Solubility Information

Solubility	DMF: 4.5 mg/mL (12.12 mM),Sonication is recommended. Ethanol: 2 mg/mL (5.39 mM),Sonication is recommended. DMSO: 4.5 mg/mL (12.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6929 mL	13.4644 mL	26.9288 mL
5 mM	0.5386 mL	2.6929 mL	5.3858 mL
10 mM	0.2693 mL	1.3464 mL	2.6929 mL
50 mM	0.0539 mL	0.2693 mL	0.5386 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

Rose TE,et al. 1-Aryl-3-(1-acylpiperidin-4-yl)urea inhibitors of human and murine soluble epoxide hydrolase: structure-activity relationships, pharmacokinetics, and reduction of inflammatory pain. J Med Chem. 2010;53(19): 7067-7075.