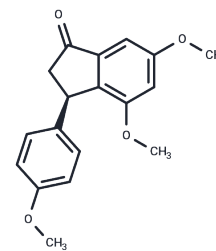


(R)-STU104

Chemical Properties

CAS No. : 2767124-77-4
 Formula: C₁₈H₁₈O₄
 Molecular Weight: 298.33
 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	(R)-STU104 is a novel TAK1-MKK3 protein-protein interaction (PPI) inhibitor that inhibits TNF- α and suppresses the TAK1/MKK3/p38/MnK1/MK2/eIF4E signalling pathway by binding to MKK3 and disrupting TAK1 phosphorylation of MKK3. (R)-STU104 is a candidate compound for the treatment of ulcerative colitis.
Targets(IC50)	MAPK,p38 MAPK,TNF
In vitro	(R)-STU104 exhibited the most potent inhibitory activity on TNF- α production, which suppressed the TAK1/MKK3/p38/MnK1/MK2/eIF4E signal pathways through binding with MKK3 and disrupting the TAK1 phosphorylating MKK3[1].
In vivo	(R)-STU104 demonstrated remarkable dose-effect relationships on both acute and chronic mouse UC models. In addition to its good pharmacokinetic (PK) and safety profile, (R)-STU104 showed better anti-UC efficacy in vivo at 10 mg/kg/d than mesalazine at the dose of 50 mg/kg/d[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.352 mL	16.760 mL	33.5199 mL
5 mM	0.6704 mL	3.352 mL	6.704 mL
10 mM	0.3352 mL	1.676 mL	3.352 mL
50 mM	0.067 mL	0.3352 mL	0.6704 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

Tang ML, et al. Discovery of First-in-Class TAK1-MKK3 Protein-Protein Interaction (PPI) Inhibitor (R)-STU104 for the Treatment of Ulcerative Colitis through Modulating TNF- α Production. J Med Chem. 2022 May 12;65(9):6690-6709.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481