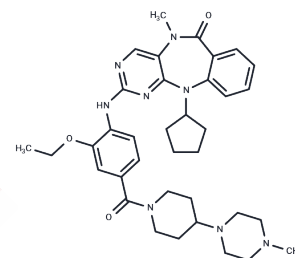


XMD17-109

Chemical Properties

CAS No. : 1435488-37-1
 Formula: C₃₆H₄₆N₈O₃
 Molecular Weight: 638.8
 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	XMD17-109 (ERK5-IN-1) is a new selective ERK-5 inhibitor (EC ₅₀ : 4.2 μM, HEK293 cells).
Targets(IC ₅₀)	ERK
In vivo	At the cellular level, ERK5-IN-1 inhibits endothelial growth factor-induced ERK5 autophosphorylation (EC ₅₀ : 90 nM). It also effectively inhibits the biochemical properties of ERK5 (IC ₅₀ : 162 nM).
Cell Research	HeLa cells are maintained in DMEM supplemented with 10% FBS, 2 mM l-glutamine, 50 U/mL penicillin G, and 50 μg/mL streptomycin. Before use HeLa cells are serum starved for 16 h in DMEM supplemented with 2 mM l-glutamine, 50 U/mL penicillin G, and 50 μg/mL streptomycin. HeLa cells are then incubated with ERK5-IN-1 at the indicated concentrations for 1 h prior to stimulation with 0.5 mol/L sorbitol for 30 min. Cells are lysed in Triton lysis buffer (50 mM Tris-HCl, pH 7.5, 1 mM EGTA, 1 mM EDTA, 1 mM sodium orthovanadate, 50 mM sodium fluoride, 1 mM sodium pyrophosphate, 0.27 mol/L sucrose, 1 μM microcystin-LR, 1% (v/v) Triton X-100, 0.1% (v/v) 2-mercaptoethanol) and 20 μg of protein loaded per well. Samples are run on 8% polyacrylamide gels using standard methods. Proteins are transferred onto nitrocellulose membranes and specific proteins detected by immunoblotting.

Solubility Information

Solubility	DMSO: 93 mg/mL (145.59 mM), Sonication is recommended. Ethanol: 93 mg/mL (145.59 mM), Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/mL refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (5.17 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	1.5654 mL	7.8272 mL	15.6544 mL
5 mM	0.3131 mL	1.5654 mL	3.1309 mL
10 mM	0.1565 mL	0.7827 mL	1.5654 mL
50 mM	0.0313 mL	0.1565 mL	0.3131 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

Denq X, et al. Eur J Med Chem. 2013, 70, 758-767.

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