

Vps34-IN-1

Chemical Properties

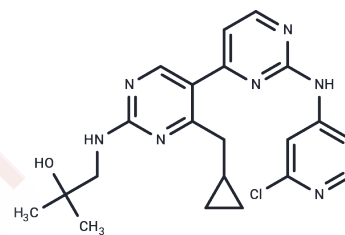
CAS No. : 1383716-33-3

Formula: C₂₁H₂₄ClN₇O

Molecular Weight: 425.91

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Vps34-IN-1 (VPS34-IN1) is a potent and highly selective Vps34 inhibitor with IC ₅₀ of 25 nM in vitro, which does not significantly inhibit the isoforms of class I as well as class II PI3Ks.
Targets(IC ₅₀)	Autophagy,PI3K
In vitro	Administration of VPS34-IN1 to cells induces a rapid dose-dependent dispersal of a specific PtdIns(3)P-binding probe from endosome membranes, within 1min, without affecting the ability of class I PI3K to regulate Akt. It can also induce a rapid ~50-60% loss of SGK3 phosphorylation within 1min. VPS34-IN1 has no inhibition to the SGK2 isoform that does not possess a PtdIns(3)P-binding PX domain[1].

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 79 mg/mL (185.49 mM),Sonication is recommended. DMSO: 79 mg/mL (185.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3479 mL	11.7396 mL	23.4791 mL
5 mM	0.4696 mL	2.3479 mL	4.6958 mL
10 mM	0.2348 mL	1.174 mL	2.3479 mL
50 mM	0.047 mL	0.2348 mL	0.4696 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.

Reference

Bago R, et al. Biochem J. 2014 Nov 1;463(3):413-27.

Zhang H, Cui Z, Cheng D, et al. RNF186 regulates EFNB1 (ephrin B1)-EPHB2-induced autophagy in the colonic epithelial cells for the maintenance of intestinal homeostasis. Autophagy. 2021 Oct;17(10):3030-3047

Gao Y, Xiong J, Chu Q Z, et al. PDZD8-mediated lipid transfer at contacts between the ER and late endosomes/lysosomes is required for neurite outgrowth[J]. Journal of Cell Science. 2021, 135(5): jcs255026.

Zhang H, Cui Z, Cheng D, et al. RNF186 regulates EFNB1 (ephrin B1)-EPHB2-induced autophagy in the colonic epithelial cells for the maintenance of intestinal homeostasis[J]. Autophagy . 2020

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:36 Washington Street,Wellesley Hills,MA 02481