

SBI-0206965

Chemical Properties

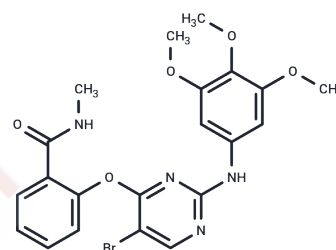
CAS No. : 1884220-36-3

Formula: C₂₁H₂₁BrN₄O₅

Molecular Weight: 489.32

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	SBI-0206965 is a potent, selective, and cell-permeable autophagy kinase ULK1 inhibitor with an IC ₅₀ of 108 nM for ULK1 kinase activity and 711 nM for ULK2.
Targets(IC ₅₀)	Apoptosis,AMPK,Autophagy
In vitro	In HEK293T transfected with WT or KI Myc-tagged ULK1 and WT Vps34, SBI-0206965 inhibits Ser249 phosphorylation of overexpressed Vps34 and Beclin1 Ser15 phosphorylation. SBI-0206965 suppresses autophagy induced by mTOR inhibition in A549 cells, and prevents ULK1-dependent cell survival in WT MEFs. In addition, SBI-0206965 also synergizes with mTOR inhibition to induce cancer cell death. [1]

Solubility Information

Solubility	DMSO: 257.5 mg/mL (526.24 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: 2 mg/mL (4.09 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	2.0437 mL	10.2183 mL	20.4365 mL
5 mM	0.4087 mL	2.0437 mL	4.0873 mL
10 mM	0.2044 mL	1.0218 mL	2.0437 mL
50 mM	0.0409 mL	0.2044 mL	0.4087 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

Elokda H, et al. J Med Chem. 2004, 47(14), 3491-3494.

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

Qiu W Q, Pan R, Tang Y, et al. Lychee seed polyphenol inhibits A β -induced activation of NLRP3 inflammasome via the LRP1/AMPK mediated autophagy induction. Biomedicine & Pharmacotherapy. 2020, 130: 110575.

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

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