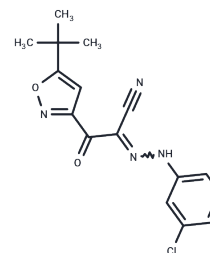


ESI-09

Chemical Properties

CAS No. :	263707-16-0
Formula:	C ₁₆ H ₁₅ ClN ₄ O ₂
Molecular Weight:	330.77
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	ESI-09 is a new-type noncyclic nucleotide EPAC antagonist. The IC ₅₀ values of ESI-09 for EPAC1 and EPAC2 is 3.2 and 1.4 μM, respectively.
Targets(IC ₅₀)	cAMP, Virus Protease
In vitro	In WT C57BL/6 mice, ESI-09 (10 mg/kg/d, i.p.) prevents SFG Rickettsiosis by inhibiting EPAC1.
In vivo	ESI-09 specifically inhibits intracellular EPAC-mediated activation of Rap1 and phosphorylation of Akt, as well as EPAC-mediated secretion in pancreatic β-cells. In pancreatic cancer cells induced by 007-AM, ESI-09 reduces cell adhesion and inhibits cell migration. In Schwann cells stimulated by CPT-cAMP, ESI-09 significantly suppresses cell differentiation and myelination. Additionally, in SC neuronal cultures, ESI-09 notably decreases the number of O1-positive and MBP-positive cells.

Solubility Information

Solubility	DMSO: 83.33 mg/mL (251.93 mM), Sonication is recommended. Ethanol: 6.6 mg/mL (19.95 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 (6.05 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	3.0232 mL	15.1162 mL	30.2325 mL
5 mM	0.6046 mL	3.0232 mL	6.0465 mL
10 mM	0.3023 mL	1.5116 mL	3.0232 mL
50 mM	0.0605 mL	0.3023 mL	0.6046 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

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