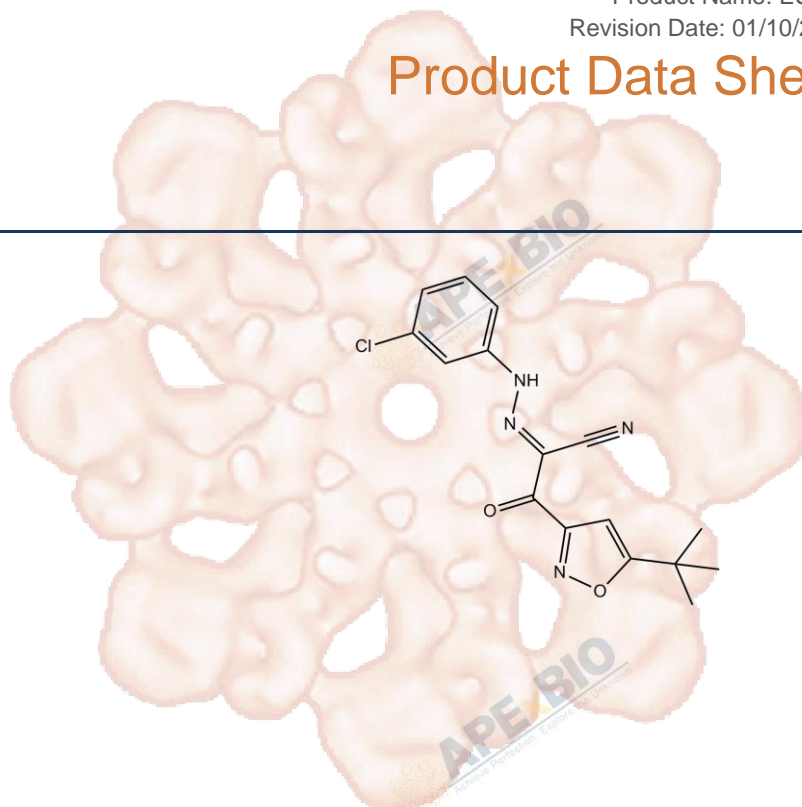


Product Data Sheet

ESI-09

Cat. No.:	B4814
CAS No.:	263707-16-0
Formula:	C ₁₆ H ₁₅ CIN ₄ O ₂
M.Wt:	330.77
Synonyms:	
Target:	Others
Pathway:	Others
Storage:	Store at -20°C



Solvent & Solubility

≥33.1 mg/mL in DMSO; insoluble in H₂O; ≥2.22 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	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

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

EPAC inhibitor, specific

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	AsPC-1 and PANC-1 pancreatic cancer cells, INS-1 cells
Preparation method:	The solubility of this compound in DMSO is > 16.6 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	10 μM, 5 minutes

	Applications:	ESI-09 (1 μ M, 10 μ M, 5 minutes) inhibited EPAC-mediated Akt phosphorylation in AsPC-1 pancreatic cancer cells. ESI-09 (5 μ M, 10 μ M) inhibited EPAC2-mediated insulin secretion in INS-1 cells. ESI-09 (5 μ M, 10 μ M) inhibited pancreatic cancer migration. In both AcPC-1 and PANC-1 cells, pretreatment with ESI-09 (15 minutes) decreased 007-AM-induced cell adhesion dose-dependently. ESI-09 significantly reduced intracellular and total bacterial counts in human umbilical vein endothelial cells.
In Vivo	Animal experiment	
	Animal models:	C57BL/6 Epac1 null mice
	Dosage form:	Intraperitoneal injection, 10 mg/kg/d, 5 d
	Applications:	Treatment with ESI-09 (10 mg/kg/d, i.p.) for 5 days protected WT C57BL/6 mice from fatal SFG rickettsiosis via pharmacological inhibition of EPAC1.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Almahariq M, Tsalkova T, Mei F C, et al. A novel EPAC-specific inhibitor suppresses pancreatic cancer cell migration and invasion[J]. Molecular pharmacology, 2013, 83(1): 122-128.
- [2]. Gong B, Shelite T, Mei F C, et al. Exchange protein directly activated by cAMP plays a critical role in bacterial invasion during fatal rickettsioses[J]. Proceedings of the National Academy of Sciences, 2013, 110(48): 19615-19620.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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