

# **Product** Data Sheet

## **ESI-08**

Cat. No.:HY-136172CAS No.:301177-43-5Molecular Formula: $C_{20}H_{23}N_3OS$ Molecular Weight:353.48Target:Ras

Pathway: GPCR/G Protein

Storage: 4°C, protect from light

\* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (282.90 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.8290 mL	14.1451 mL	28.2901 mL
	5 mM	0.5658 mL	2.8290 mL	5.6580 mL
	10 mM	0.2829 mL	1.4145 mL	2.8290 mL

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

## **BIOLOGICAL ACTIVITY**

Description	ESI-08 is a potent and selective EPAC antagonist, which can completely inhibit both EPAC1 and EPAC2 (IC $_{50}$ of 8.4 $\mu$ M) activity. ESI-08 selectively blocks cAMP-induced EPAC activation, but does not inhibit cAMP-mediated PKA activation <sup>[1]</sup> .
IC <sub>50</sub> & Target	IC50: 8.4 $\mu$ M (EPAC2) <sup>[1]</sup> EPAC1 <sup>[1]</sup>
In Vitro	Exchange proteins directly activated by cAMP (EPAC) are a family of guanine nucleotide exchange factors that regulate a wide variety of intracellular processes in response to second messenger cAMP. ESI-08 at 25 μM has been found not to alter cAMP-induced type I and II PKA holoenzymes activation while H89, a selective PKA inhibitor, blocked the type I or II PKA activities completely <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

[1]. Chen H, et al. 5-Cyano-6-oxo-1,6-dihydro-pyrimidines as potent antagonists targeting exchange proteins directly activated by cAMP. Bioorg Med Chem Lett. 2012 Jun

15;22(12):4038-43.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com