Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

ESI-09

Catalog No: tcsc3420

Available Sizes

Size: 5mg

Size: 10mg

Specifications

CAS No:
263707-16-0

Formula:
$C_{16}H_{15}ClN_4O_2$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 47 mg/mL (142.09 mM)

Observed Molecular Weight:
330.77

Product Description

ESI-09 is a novel noncyclic nucleotide **EPAC** antagonist with **IC_{50}** values of 3.2 and 1.4 μM for EPAC1 and EPAC2, respectively.

IC50 & Target: IC50: 3.2 μM (EPAC1), 1.4 μM (EPAC2)[1]

In Vitro: While cAMP competes with 8-NBD-cAMP binding with an IC_{50} of 39 μM, ESI-09 shows an increased potency with an apparent IC_{50} of 10 μM. ESI-09 inhibis cAMP-mediated EPAC2 and EPAC1 GEF activity with an IC_{50} of 1.4 and 3.2μM, respectively. ESI-

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

09 could fit well into the functional cAMP-binding pocket of EPAC1, establishing favorable hydrophobic and hydrogen bonding interactions with the protein's active-site residues. ESI-09 inhibits 007-AM-stimulated Akt phosphorylation at T308 and S473 in a dose-dependent manner. ESI-09 inhibits pancreatic cancer cells AsPC-1 and PANC-1 migration. ESI-09 inhibits EPAC1-mediated adhesion of PDA cells on collagen I[1]. Exposure to ESI-09 significantly reduces intracellular and total bacterial counts in HUVECs at 30 min postinfection with 10 multiplicities of infection (MOI) of *R. australis* compared with similarly infected controls[2].

In Vivo: Treatment with ESI-09 dramatically protects WT mice against *R. australis* infection with much milder disease manifestations and significantly improves survival[2].