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

HG-9-91-01

Catalog No: tcsc1749

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1456858-58-4

Formula:
$C_{32}H_{37}N_7O_3$

Pathway:
Immunology/Inflammation

Target:
Salt-inducible Kinase (SIK)

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 150 mg/mL (264.23 mM)

Alternative Names:
SIK inhibitor 1

Observed Molecular Weight:
567.68

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Product Description

HG-9-91-01 is a potent and highly selective salt-inducible kinase (**SIK**s) inhibitor with **IC_{50}**s of 0.92 nM, 6.6 nM and 9.6 nM for **SIK1**, **SIK2** and **SIK3** respectively.

IC50 & Target: IC50: 0.92/6.6/9.6 nM (SIK1/2/3)[1]

In Vitro: HG-9-91-01 inhibits a number of protein tyrosine kinases that possess a threonine residue at the gatekeeper site, such as Src family members (Src, Lck, and Yes), BTK, and the FGF and Ephrin receptors[1]. HG-9-91-01 demonstrates a strong correlation between the potency of SIK2 inhibition and enhanced IL-10 production. In agreement with these reports, pretreating BMDCs with HG-9-91-01, a recently described inhibitor of SIK1-3, along with several other kinases, results in concentration-dependent potentiation of zymosan-induced IL-10 production with an EC_{50} ~200 nM and a maximum effect similar to that observed with PGE_2[2]. HG-9-91-01 has more than a 100-fold greater potency against SIKs than AMPK (IC_{50}=4.5 μM) in a cell-free assay. HG-9-91-01 treatment dose dependently increased mRNA expression of *Pck1* and *G6pc* and that effect is similar in cells treated with 4 μM HG-9-91-01 or 0.1 μM glucagon. Consistent with this observation, there is also a dose-dependent increase in glucose production following HG-9-91-01 treatment[3].