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

TMP269

Catalog No: tcsc2463

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Size: 200mg

Specifications

CAS No:
1314890-29-3

Formula:
$C_{25}H_{21}F_3N_4O_3S$

Pathway:
Epigenetics;Cell Cycle/DNA Damage

Target:
HDAC;HDAC

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 41 mg/mL (79.69 mM)

Observed Molecular Weight:
514.52

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Product Description

TMP269 is a novel and selective class IIa **histone deacetylase (HDAC)** inhibitor with **IC_{50}**s of 157 nM, 97 nM, 43 nM and 23 nM for HDAC4, HDAC5, HDAC7 and HDAC9, respectively.

IC50 & Target: IC50: 23 nM (HDAC9), 43 nM (HDAC7), 97 nM (HDAC5), 157 nM (HDAC4)[1]

In Vitro: TMP269 has no impact on the mitochondrial activity and/or the viability of human $CD4^+$ T cells at 10 μM, and may be used as tools to identify the endogenous substrates of the class IIa HDAC enzymes[1]. In IEC-18 intestinal epithelial cells, TMP269 prevents cell cycle progression, DNA synthesis, and proliferation induced in response to G protein-coupled receptor/PKD1 activation[2]. As with HDAC4 knockdown, TMP269 significantly enhances cytotoxicity induced by CFZ in MM cell lines, upregulating ATF4 and CHOP and inducing apoptosis. TMP269 does not hyperacetylate histone H3K9 or α-tubulin in MM cell lines, confirming that it has no inhibitory effects on class I or IIb HDACs. In a dosedependent manner, TPM269-induced cytotoxicity is associated with cleavage of caspase-8, -9, -3 and PARP, consistent with apoptosis[3].