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

RG2833

Catalog No: tcsc1526

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1215493-56-3

Formula:
$C_{20}H_{25}N_3O_2$

Pathway:
Epigenetics;Cell Cycle/DNA Damage

Target:
HDAC;HDAC

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 50 mg/mL (147.31 mM)

Alternative Names:
RGFP109

Observed Molecular Weight:
339.43

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Product Description

RG2833 is a brain-penetrant **HDAC** inhibitor with **IC_{50}** of 60 nM and 50 nM for HDAC1 and HDAC3, respectively.

IC50 & Target: IC50: 60 nM (HDAC1), 50 nM (HDAC3)[1]

In Vitro: The K_i values of RG2833 for HDAC1 and HDAC3 are 32 nM and 5 nM, respectively. RG2833 is highly active in the whole tested concentration range from 1 to 10 μM. Continuous incubation with RG2833 slows the increase in frataxin protein, and when the compound is removed, frataxin protein levels rapidly increased in the cells from patient P13[1]. RG2833 produces significant increases in brain aconitase enzyme activity, together with reduction of neuronal pathology of the dorsal root ganglia (DRG)[2].

In Vivo: RG2833 (150 mg/kg) is able to correct frataxin deficiency in the brain and heart of KIKI mice 24 hours after a single injection, but not when lower doses are used. When followed in time, the frataxin mRNA increase induced by RG2833 in the KIKI mouse can be first detected at 12 hours and reach a maximum at 24 hours in both brain and heart[1]. RG2833 (100 mg/kg, s.c.) is well tolerated in chronic dosing of mice without toxicity. RG2833 improves motor coordination of YG8R FRDA mice. RG2833 increases frataxin protein expression in the brain of YG8R FRDA mice[2]. RGFP109 (30 mg/kg, p.o. once daily for 6 days) has no acute effects on dyskinesia after single or 6 days once-daily treatment. One week following cessation of RGFP109, dyskinesia and duration of ON-time with disabling dyskinesia are reduced by 37% and 50%, respectively[3].