

# RGFP966

**Catalog No: tcsc1628**



## Available Sizes

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**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

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**CAS No:**

1357389-11-7

**Formula:**

$C_{21}H_{19}FN_4O$

**Pathway:**

Epigenetics;Cell Cycle/DNA Damage

**Target:**

HDAC;HDAC

**Purity / Grade:**

>98%

**Solubility:**

H2O :

**Observed Molecular Weight:**

362.4

## Product Description

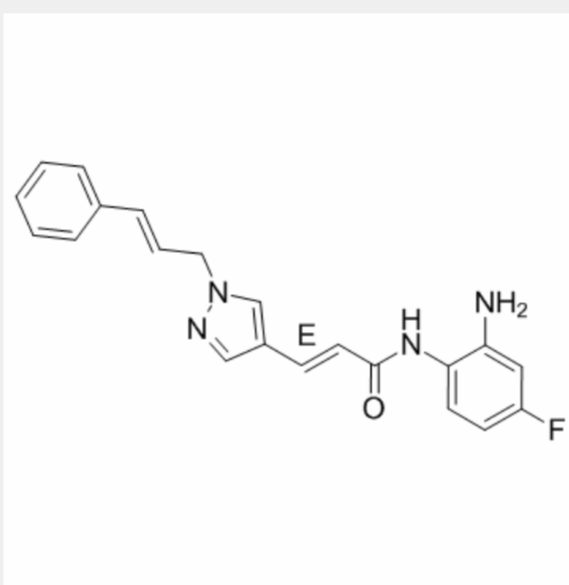
RGFP966 is a highly selective **HDAC3** inhibitor with an **IC<sub>50</sub>** of 80 nM and shows no inhibition to other HDACs at concentrations up to

15  $\mu$ M.

IC50 & Target: IC50: 80 nM (HDAC3)<sup>[1]</sup>

**In Vitro:** RGFP966 potently and selectively inhibits HDAC 3 with IC<sub>50</sub> of 0.21  $\mu$ M in RAW 264.7 macrophages, while HDACs 1 (IC<sub>50</sub> =5.6  $\mu$ M), 2 (9.7  $\mu$ M) and 8 (>100  $\mu$ M), indicating a good level of selectivity for HDAC 3. The mRNA levels of HDACs 1, 2 and 3 are not significantly affected by RGFP966 in RAW 264.7 macrophages, whereas the HDAC 1 and HDAC 2 protein levels are slightly, though significantly, reduced upon RGFP966 treatment. Moreover, RGFP966 significantly reduced the transcriptional activity of NF- $\kappa$ B p65, whereas NF- $\kappa$ B p65 acetylation and localization remain unaltered<sup>[2]</sup>.

**In Vivo:** RGFP966 (10 and 25 mg/kg) treatment significantly improves body weight, rotarod performance and several measures of motor function in the open field locomotor test<sup>[3]</sup>. RGFP966 at a 10 mg/kg dose penetrates the blood-brain barrier into rat auditory cortex with typical pharmacokinetics, which together establish feasibility for the modulation of A1 plasticity due to action in the auditory cortex<sup>[4]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!