



PCI-34051

Catalog No: tcsc1277

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Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

950762-95-5

Formula:

 $C_{17}^{H}_{16}^{N}_{2}^{O}_{3}^{O}$

Pathway:

Epigenetics; Cell Cycle/DNA Damage

Target:

HDAC;HDAC

Purity / Grade:

>98%

Solubility:

DMSO : \geq 30 mg/mL (101.24 mM)

Observed Molecular Weight:

296.32

Product Description

PCI-34051 is a potent and selective **HDAC8** inhibitor with IC_{50}



of 10 nM, with >200-fold selectivity over the other HDAC isoforms.

IC50 & Target: IC50: 10 nM (HDAC8), 2.9 μ M (HDAC6), 4 μ M (HDAC1), 13 μ M (HDAC10) $^{[1]}$

In Vitro: PCI-34051 inhibits pure recombinant HDAC8 with K_i of 10 nM with >200-fold selectivity over the other HDACs tested, including HDACs 1, 2, 3, 6 and 10. PCI-34051 is derived from a low molecular weight hydroxamic acid scaffold that possessed promising potency (HDAC8; K_i =2 μ M) and selectivity (approximately fivefold) for HDAC8 relative to the other class I HDACs. PCI-34051 is found to induce apoptosis at low micromolar concentrations in cell lines derived from T-cell lymphomas, including Jurkat and HuT78, whereas doses as high as 20 μ M has no effect on B-cell- or myeloid-derived lymphomas or solid tumor lines^[1].

In Vivo: Administration of PCI-34051 and Dexamethasone reduces the eosinophilic inflammation and airway hyperresponsiveness in asthma to reduce the airway remodeling^[2].

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