

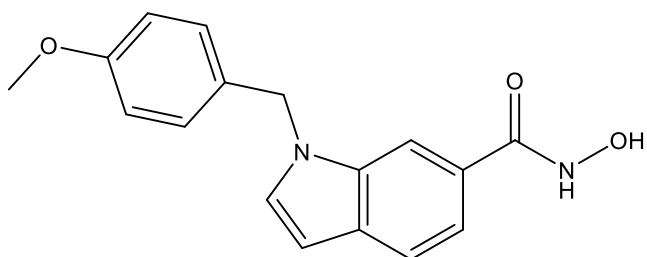
Catalog #10-3396

PCI-34051

CAS# 950762-95-5

N-Hydroxy-1-[(4-methoxyphenyl)methyl]-1H-indole-6-carboxamide

Lot # E109181



PCI-34051 is a potent and selective HDAC8 inhibitor ($IC_{50}=10$ nM) with greater than 200-fold selectivity over HDACs 1, 2, 3, 6, 10.¹ Unlike broad-spectrum HDAC inhibitors, it does not cause detectable histone or tubulin acetylation.¹ Studies employing PCI-34051 showed that HDAC8 catalyzes the hydrolysis of long chain fatty acyl lysine.² It is a very useful tool for exploring the role of HDAC8 in cellular function.³⁻⁶

- 1) Balasubramanian *et al.* (2008), *A novel histone deacetylase 8 (HDAC8)-specific inhibitor PCI-34051 induces apoptosis in T-cell lymphomas*; *Leukemia* **22** 1026
- 2) Aramsangtienchai *et al.* (2016), *HDAC8 Catalyzes the Hydrolysis of Long Chain Fatty Acyl Lysine*; *ACS Chem. Biol.* **11** 2685
- 3) Dasgupta *et al.* (2016), *HDAC8 Inhibition Blocks SMC3 Deacetylation and Delays Cell Cycle Progression without Affecting Cohesion-dependent Transcription in MCF7 Cancer Cells*; *J. Biol. Chem.* **291** 12761
- 4) Ha *et al.* (2016), *Inhibition of Interleukin 1 β (IL-1 β) Expression by Anthrax Lethal Toxin (LeTx) is Reversed by Histone Deacetylase 8 (HDAC8) Inhibition in Murine Macrophages*; *J. Biol. Chem.* **291** 8745
- 5) Fukuda *et al.* (2024), *Inhibition of HDAC8 Reduces the Proliferation of Adult Neural Stem Cells in the Subventricular Zone*; *Int. J. Mol. Sci.* **25** 2540
- 6) Mormino *et al.* (2024), *Histone-deacetylase 8 drives the immune response and the growth of glioma*; *Glia* **69** 2682

PHYSICAL DATA

Molecular Weight:	296.33
Molecular Formula:	C ₁₇ H ₁₆ N ₂ O ₃
Purity:	>98% (TLC)
	NMR: (Conforms)
Solubility:	DMSO (50 mg/mL)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com