

Catalog # 10-3306

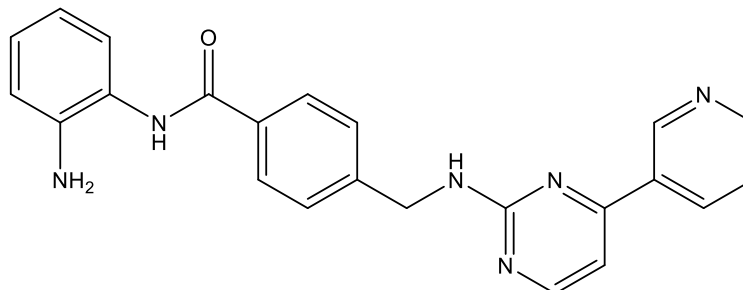
Mocetinostat

CAS# 726169-73-9

N-(2-Aminophenyl)-4-[(4-pyridin-3-ylpyrimidin-2-ylamino)methyl]benzamide

MGCD0103

Lot # X107856



Class I, isoform-selective HDAC inhibitor, IC_{50} s=0.15, 0.29, 1.66 and 0.59 μ M for HDAC1, 2, 3 and 11 respectively.¹ Induces hyperacetylation of histones, induces expression of the tumor suppressor p21WAF1 and inhibits proliferation of human cancer cells.² Displays antifibrotic effects in ischemic heart failure.³ Attenuates the development of hypersensitivity in models of neuropathic pain.⁴ Active *in vivo*.⁵

- 1) Zhou *et al.* (2008), *Discovery of N-(2-aminophenyl)-4-[(4-pyridin-3-ylpyrimidin-2-ylamino)methyl]benzamide (MGCD0103), an orally active histone deacetylase inhibitor*, J. Med. Chem., **51** 4072
- 2) Raepel *et al.* (2009), *SAR and biological evaluation of analogues of a small molecule histone deacetylase inhibitor N-(2-aminophenyl)-4-[(4-(pyridine-3-yl)pyrimidin-2-ylamino)methyl]benzamide (MGCD0103)*; Bioorg. Med. Chem. Lett., **19** 644
- 3) Nural-Guvener *et al.* (2015), *Anti-Fibrotic Effects of Class I HDAC Inhibitor, Mocetinostat is Associated with IL-6/Stat3 Signaling in Ischemic Heart Failure*; Int. J. Mol. Sci., **16** 11482
- 4) Denk *et al.* (2013), *HDAC inhibitors attenuate the development of hypersensitivity in models of neuropathic pain*; Pain, **154** 1668
- 5) Bonfils *et al.* (2008), *Evaluation of the pharmacodynamics effects of MGCD0103 from preclinical models to human using a novel HDAC enzyme assay*; Clin. Cancer Res., **14** 3441

PHYSICAL DATA

Molecular Weight:	396.44
Molecular Formula:	C ₂₃ H ₂₀ N ₆ O
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

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