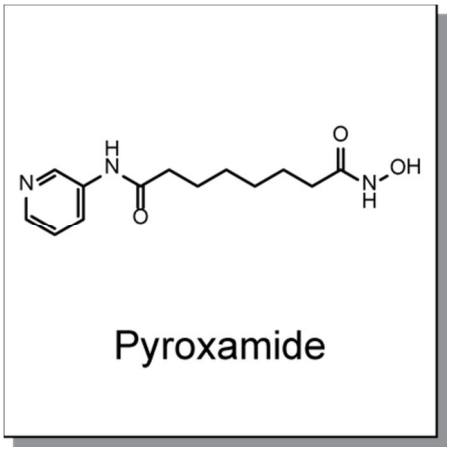
Product Specification Sheet

Product Name: Pyroxamide

Catalog Number: C7376-5 (powder)
C7376-5s (10mM in DMSO)

Package Size: 5 mg



Technical information:

Chemical Formula:	$C_{13}H_{19}N_3O_3$
CAS #:	382180-17-8
Molecular Weight:	265.31
Purity:	>98%
Formulation:	Off-white
Solubility:	Soluble in DMSO up to 50 mM
Chemical Name:	N-Hydroxy-N'-3-pyridinyloctanediamid
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Handling:

- For C7376-5 (powder), add 1.885 mL of DMSO to make 10 mM solution.
- For C7376-5s, briefly spin the vial at 500 rpm inside a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: Pyroxamide is a potent histone deacetylase (HDAC) inhibitor with IC50 of 100nM. Pyroxamide induced terminal differentiation in murine erythroleukemia (MEL) cells, and inhibited the growth by cell cycle arrest or apoptosis in a variety of tumor cells[1-4]. An accumulation of acetylated histones and increased levels of p21/WAF1 expression were detected in cancer cells and in prostate xenografts treated with pyroxamide[1,2].

Reference:

1. Butler et al. Inhibition of transformed cell growth and induction of cellular differentiation by pyroxamide, an inhibitor of histone deacetylase. Clin.Cancer Res. 7 962. (2001)
2. Kutko, MC., et al. Histone deacetylase inhibitors induce growth suppression and cell death in human rhabdomyosarcoma in vitro. Clin Cancer Res. Nov 15;9(15):5749-55.(2003)
3. Kouraklis G, Theocharis S. Histone deacetylase inhibitors and anticancer therapy. Curr Med Chem Anticancer Agents. Jul;2(4):477-84.(2002)
4. Kouraklis G, Theocharis S Histone deacetylase inhibitors: a novel target of anticancer therapy (review). Oncol Rep. Feb;15(2):489-94. (2006)

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