

## Certificate of Analysis

**Product Name:** Pyroxamide

**Catalog No.:** 4403

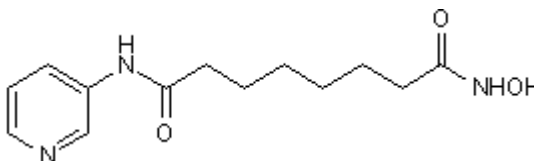
**Batch No.:** 1

CAS Number: 382180-17-8

IUPAC Name: *N*-Hydroxy-*N*-3-pyridinyloctanediamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>13</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>·<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O  
**Batch Molecular Weight:** 278.82  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 20 mM with gentle warming  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.2% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	56	7.41	15.07
Found	55.82	6.97	14.92

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Inhibitor of histone deacetylase (HDAC); potently inhibits affinity purified HDAC1. Also inhibits the growth of tumor cells in vitro and in vivo. Induces p21/WAF1 expression in tumor cells.

**Physical and Chemical Properties:**

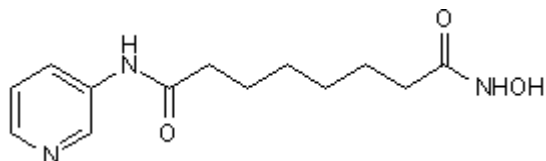
Batch Molecular Formula: C<sub>13</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>·<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 278.82

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 20 mM with gentle warming

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Butler *et al*** (2001) Inhibition of transformed cell growth and induction of cellular differentiation by pyroxamide, an inhibitor of histone deacetylase. *Clin.Cancer Res.* **7** 962. PMID: 11309347.

**Remiszewski *et al*** (2002) Inhibitors of human histone deacetylase: synthesis and enzyme and cellular activity of straight chain hydroxamates. *J.Med.Chem.* **45** 755. PMID: 11831887.

**Bradner *et al*** (2010) Chemical phylogenetics of histone deacetylases. *Nat.Chem.Biol.* **6** 238. PMID: 20139990.

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