

# **Certificate of Analysis**

Print Date: Dec 6th 2017

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Product Name: LMK 235 Catalog No.: 4830 Batch No.: 1

CAS Number: 1418033-25-6

IUPAC Name: N-[[6-(Hydroxyamino)-6-oxohexyl]oxy]-3,5-dimethylbenzamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{22}N_2O_4$ Batch Molecular Weight:294.35Physical Appearance:White solid

**Solubility:** DMSO to 100 mM

ethanol to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

## 2. ANALYTICAL DATA

Melting Point: At 134°C

**HPLC:** Shows 98% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.21 7.53 9.52 Found 61.2 7.45 9.36



# **Product Information**

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#### **Description:**

Selective histone deacetylase (HDAC) 4 and HDAC5 inhibitor (IC $_{50}$  values are 4.22, 11.9, 55.7, 320, 852, 881, and 1278 nM for HDAC 5, 4, 6, 1, 11, 2, and 8, respectively). Demonstrates activity against chemoresistant cancer cell lines in an MTT assay for cytotoxicity using human ovarian cancer cell lines A2780 and cisplatin resistant A2780CisR (IC $_{50}$  = 0.49 and 0.32  $\mu$ M respectively).

#### **Physical and Chemical Properties:**

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Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

# Solubility & Usage Info:

DMSO to 100 mM ethanol to 100 mM

#### 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:

Marek et al (2013) Histone deacetylase (HDAC) inhibitors with a novel connecting unit linker region reveal a selectivity profile for HDAC4 and HDAC5 with improved activity against chemoresistant cancer cells. J.Med.Chem. 56 427. PMID: 23252603.