

Certificate of Analysis

Product Name: MI 192

Catalog No.: 5647

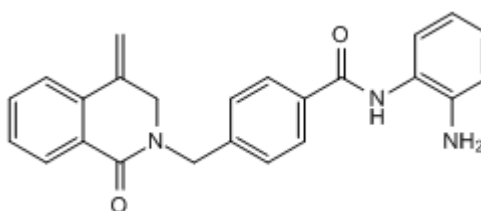
Batch No.: 1

CAS Number: 1415340-63-4

IUPAC Name: *N*-(2-Aminophenyl)-4-[(3,4-dihydro-4-methylene-1-oxo-2(1*H*)-isoquinolinyl)methyl]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₁N₃O₂
Batch Molecular Weight: 383.44
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.35 (Dichloromethane:Methanol [9:1])
HPLC: Shows 98.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	75.18	5.52	10.96
Found	75.28	5.61	10.81

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

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Description:

Potent and selective HDAC2/3 inhibitor (IC₅₀ values are 16 and 30 nM, respectively). Exhibits >250-fold selectivity for HDAC2/3 over other HDAC isoforms. Promotes apoptosis of leukemia cell lines in vitro. Also attenuates IL-6 production in rheumatoid arthritis PBMCs in vitro.

Physical and Chemical Properties:

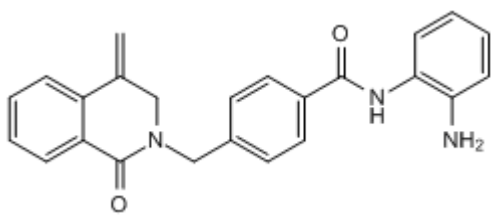
Batch Molecular Formula: C₂₄H₂₁N₃O₂

Batch Molecular Weight: 383.44

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Gillespie *et al* (2012) Histone deacetylases are dysregulated in rheumatoid arthritis and a novel histone deacetylase 3-selective inhibitor reduces interleukin-6 production by peripheral blood mononuclear cells from rheumatoid arthritis patients. *Arthrit.Rheumat.* **64** 418. PMID: 21952924.

Boissinot *et al* (2012) Induction of differentiation and apoptosis in leukaemic cell lines by the novel benzamide family histone deacetylase 2 and 3 inhibitor MI-192. *Leuk.Res.* **36** 1304. PMID: 22818799.

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO 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.

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