

Certificate of Analysis

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Product Name: Daminozide

CAS Number: 1596-84-5

IUPAC Name: 1-(2,2-Dimethylhydrazide)butanedioic acid

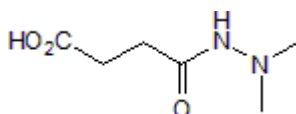
Catalog No.: 4684

Batch No.: 1

EC Number: 216-485-9

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆H₁₂N₂O₃
Batch Molecular Weight: 160.17
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 20 mM
 water to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	44.99	7.55	17.49
Found	45.09	7.26	17.71

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

Product Information

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Description:

Histone demethylase KDM2/7 subfamily inhibitor (IC₅₀ values are 0.55, 1.5 and 2.1 μ M for PHF8, KDM2A and KDM7A respectively). Exhibits \geq 60-fold selectivity for KDM2/7 demethylases over other histone demethylases and 2-oxoglutarate oxygenases (IC₅₀ > 100 μ M).

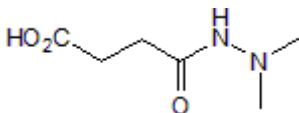
Physical and Chemical Properties:

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Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 20 mM

water 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:

Rose et al (2012) Plant growth regulator daminozide is a selective inhibitor of human KDM2/7 histone demethylases. *J.Med.Chem.* **55** 6639. PMID: 22724510.

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