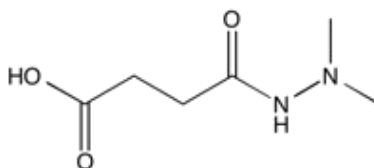


Catalog # 10-1403

Daminozide

1596-84-5

N-(Dimethylamino)succinamic acid
1-(2,2-Dimethylhydrazide)butanedioic acid
Lot # X105217



Daminozide is a plant growth regulator. A selective inhibitor of the KDM2/7 JmjC subfamily of histone demethylases. IC_{50} =1.5, 0.55 and 2.1 μ M for KDM2A, PHF8 and KDM7A respectively. Highly selective over other subfamily members (KDM3, KDM4, KDM5 and KDM6) as well as other 2-oxoglutarate oxygenases (FIH, PHD2 and BBOX1), IC_{50} >100 μ M.¹ Decreases tumorsphere formation in human breast cancer cells and acts synergistically with cisplatin in cell killing.²

- 1) Rose *et al.* (2012), *Plant growth regulator daminozide is a selective inhibitor of human KDM2/7 histone demethylases*; J. Med. Chem., **55** 6639
- 2) Chen *et al.* (2016), *Lysine demethylase 2A promotes stemness and angiogenesis of breast cancer by upregulating Jagged1*; Oncotarget, **7** 27689

PHYSICAL DATA

Molecular Weight:	160.17
Molecular Formula:	C ₆ H ₁₂ N ₂ O ₃
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml), Water (up to 20 mg/ml with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 3 years from the date of purchase. Solutions in DMSO or distilled water may be stored at -20°C for up to 3 months.

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