

Product Name: Marimastat

Catalog No.: 2631

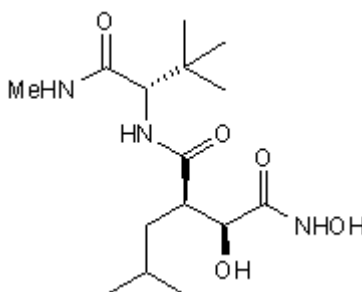
Batch No.: 6

CAS Number: 154039-60-8

IUPAC Name: (2*S*,3*R*)-*N*4-[(1*S*)-2,2-Dimethyl-1-[(methylamino)carbonyl]propyl]-*N*1,2-dihydroxy-3-(2-methylpropyl)butanediamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₂₉N₃O₅
Batch Molecular Weight: 331.41
Physical Appearance: white solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.53 (Chloroform:Methanol:Water. [150:45:5])
HPLC: Shows 99.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -32.4 (Concentration = 0.5, Solvent = Methanol)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.36	8.82	12.67
Found	54.15	8.86	12.61

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

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Description:

Broad spectrum inhibitor of MMPs (IC₅₀ values are 3, 5, 6, 9 and 13 nM for MMP-9, MMP-1, MMP-2, MMP-14 and MMP-7 respectively). Inhibits peritoneal dissemination of human gastric cancer cells in vivo through inhibition of tumor angiogenesis.

Physical and Chemical Properties:

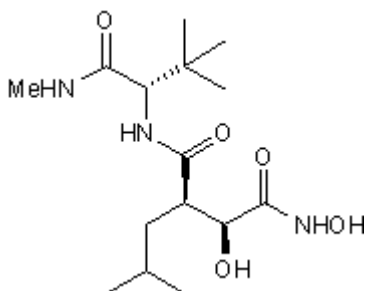
Batch Molecular Formula: C₁₅H₂₉N₃O₅

Batch Molecular Weight: 331.41

Physical Appearance: white solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at -20°C

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.

References:

Rasmussen and McCann (1997) Matrix metalloproteinase inhibition as a novel anticancer strategy: a review with special focus on batimastat and marimastat. *Pharmacol.Ther.* **75** 69. PMID: 9364582.

Wada et al (2003) Reduced angiogenesis in peritoneal dissemination of gastric cancer through gelatinase inhibition. *Clin.Exp.Metastasis* **20** 431. PMID: 14524532.

Bjornland et al (2005) Matrix metalloproteinases participate in osteosarcoma invasion. *J.Surg.Res.* **127** 151. PMID: 16083752.

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