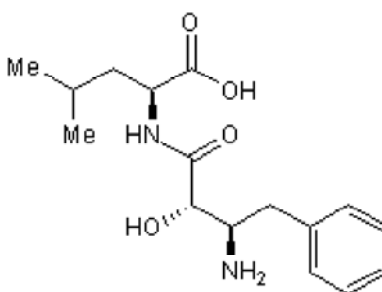


**Product Name:** Bestatin  
**CAS Number:** 58970-76-6  
**IUPAC Name:** N-[(2*S*,3*R*)-3-Amino-2-hydroxy-1-oxo-4-phenylbutyl]-L-leucine

**Catalog No.:** 1956      **Batch No.:** 2  
**EC Number:** 261-529-2

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>16</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>·¼H<sub>2</sub>O  
**Batch Molecular Weight:** 312.88  
**Physical Appearance:** Off-white solid  
**Solubility:** 1eq. NaOH to 10 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -15.1 (Concentration = 1, Solvent = 1N HCl)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	61.42	7.89	8.95
Found	61.08	7.98	8.98

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

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IUPAC Name: N-[(2S,3R)-3-Amino-2-hydroxy-1-oxo-4-phenylbutyl]-L-leucine

**Description:**

Aminopeptidase inhibitor ( $K_i = 0.001 - 90$  mM); inhibits enkephalin metabolism and leukotriene A<sub>4</sub> hydrolase. Inhibits tumor cell proliferation.

**Physical and Chemical Properties:**

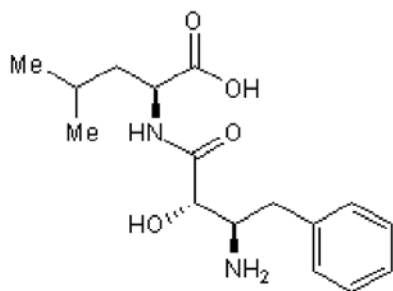
Batch Molecular Formula: C<sub>16</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>·½H<sub>2</sub>O

Batch Molecular Weight: 312.88

Physical Appearance: Off-white solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

1eq. NaOH to 10 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:**

**Scornik and Botbol** (2001) Bestatin as an experimental tool in mammals. *Curr. Drug Metab.* **2** 67. PMID: 11465152.

**Imamura and Kimura** (2000) Effect of ubenimex (Bestatin) on the cell growth and phenotype of HL-60 and HL-60R cell lines: up- and down-regulation of CD13/aminopeptidase N. *Leuk. Lymphoma* **37** 663. PMID: 11042531.

**Umezawa et al** (1976) Bestatin, an inhibitor of aminopeptidase B, produced by actinomycetes. *J. Antibiot.* **29** 97. PMID: 931798.

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