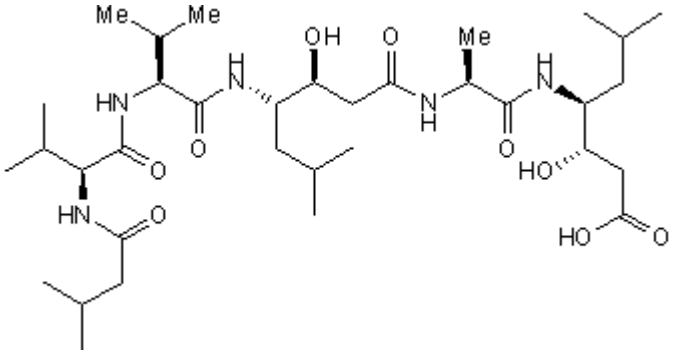
Certificate of Analysis

Product Name: **Pepstatin A** **Catalog No.: 1190** **Batch No.: 18**

CAS Number: 26305-03-3 EC Number: 247-600-0

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	$C_{34}H_{63}N_5O_9$
Batch Molecular Weight:	685.89
Physical Appearance:	White lyophilised solid
Solubility:	Soluble to 1 mg/ml in ethanol
Storage:	Desiccate at -20°C
Peptide Sequence:	

2. ANALYTICAL DATA

HPLC:	Shows 98% purity

Product Name: **Pepstatin A** **Catalog No.: 1190** **Batch No.: 18**

CAS Number: 26305-03-3 EC Number: 247-600-0

Description:

Irreversible inhibitor of aspartic proteases. Inhibits lysosomal proteases and interferes with autolysosomal digestion when used in combination with E 64d (Cat. No. 4545).

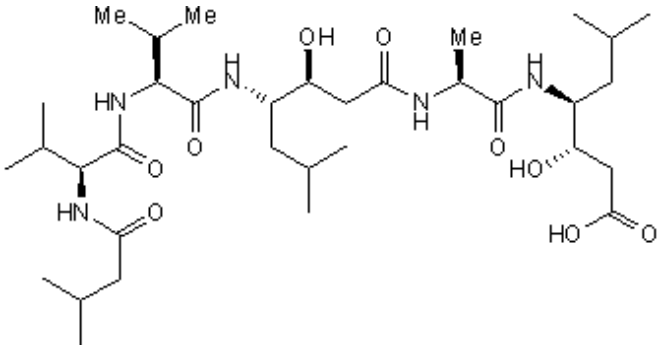
Physical and Chemical Properties:

Batch Molecular Formula: $C_{34}H_{63}N_5O_9$

Batch Molecular Weight: 685.89

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in ethanol

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 µm filter to remove potential bacterial contamination whenever possible.

References:

Merck Index ***12*** 7290.

Marciniszyn *et al* (1976) Mode of inhibition of acid proteases by pepstatin. J.Biol.Chem. ***251*** 7088. PMID: 993206.

Sato *et al* (2007) Autophagy is activated in colorectal cancer cells and contributes to the tolerance to nutrient deprivation. Cancer Res. ***67*** 9677. PMID: 17942897.