

Certificate of Analysis

www.tocris.com

Product Name: P11
CAS Number: 848644-86-0

Catalog No.: 4744 **Batch No.:** 2

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₀H₄₈N₁₂O₉
Batch Molecular Weight: 720.78
Physical Appearance: White lyophilised solid
Net Peptide Content: 58%
Counter Ion: TFA
Solubility: Soluble to 2 mg/ml in water
Storage: Store at -20°C
Peptide Sequence: His-Ser-Asp-Val-His-Lys-NH₂

2. ANALYTICAL DATA

HPLC: Shows 96.2% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical		Actual		Amino Acid Theoretical		Actual	
Ala				Lys	1.00		0.99
Arg				Met			
Asx	1.00		1.01	Phe			
Cys				Pro			
Glx				Ser	1.00		0.99
Gly				Thr			
His	2.00		1.89	Trp			
Ile				Tyr			
Leu				Val	1.00		0.91

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

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: P11
CAS Number: 848644-86-0

Catalog No.: 4744 **Batch No.:** 2

Description:

Potent antagonist of the integrin $\alpha_v\beta_3$ -vitronectin interaction (IC_{50} = 25.72 nM). Blocks proliferation and induces apoptosis in HUVECs; antiangiogenic.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{30}H_{48}N_{12}O_9$
Batch Molecular Weight: 720.78
Physical Appearance: White lyophilised solid

Peptide Sequence:

His-Ser-Asp-Val-His-Lys-NH₂

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 2 mg/ml in water
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.

Net Peptide Content: 58% (Remaining weight made up of counterions and residual water).

Counter Ion: TFA

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 as 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 μ m filter to remove potential bacterial contamination whenever possible.

References:

Bang *et al* (2011) Pharmacoproteomic analysis of a novel cell-permeable inhibitor of tumor-induced angiogenesis. *Mol.Cell Proteomics* **10** M110. PMID: 21558493.

Choi *et al* (2010) Site-specific inhibition of integrin $\alpha_v\beta_3$ -vitronectin association by a ser-aspartate-valine sequence through an Arg-Gly-Asp-binding site of the integrin. *Proteomics* **10** 72. PMID: 19882657.

Lee *et al* (2004) High-throughput screening of novel peptide inhibitors of an integrin receptor from the hexapeptide library by using a protein microarray chip. *J.Biomol.Screen.* **9** 687. PMID: 15634795.

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

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel: +1 612 379 2956