

Certificate of Analysis

www.tocris.com

Product Name: Peptide F9

Catalog No.: 1903

Batch No.: 1

CAS Number: 117609-40-2

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₁₀ H ₁₇₅ N ₃₁ O ₂₇ S ₂
Batch Molecular Weight:	2427.9
Physical Appearance:	White lyophilised solid
Net Peptide Content:	86%
Solubility:	Soluble to 2 mg/ml in water
Storage:	Desiccate at -20°C
Peptide Sequence:	Arg-Tyr-Val-Val-Leu-Pro-Arg-Pro-Val-Cys-Phe-Glu-Lys-Gly-Met-Asn-Tyr-Thr-Val-Arg

2. ANALYTICAL DATA

HPLC: Shows >95% purity

3. AMINO ACID ANALYSIS DATA

Amino Acid		Theoretical	Actual	Amino Acid		Theoretical	Actual
Ala				Lys	1.00	0.99	
Arg	3.00	3.00	Met	1.00	1.02		
Asx	1.00	0.97	Phe	1.00	1.03		
Cys	1.00		Pro	2.00	2.06		
Glx	1.00	1.05	Ser				
Gly	1.00	1.05	Thr	1.00	1.05		
His			Trp				
Ile			Tyr	2.00	2.06		
Leu	1.00	0.99	Val	4.00	3.92		

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

Product Name: Peptide F9

Catalog No.: 1903

Batch No.: 1

CAS Number: 117609-40-2

Description:

Peptide derived from the heparin-binding domain in the B1 chain of laminin. Binds to heparin, promotes cell adhesion, and inhibits the migration towards, and adhesion of metastatic fibrosarcoma cells to laminin.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₁₀H₁₇₅N₃₁O₂₇S₂

Batch Molecular Weight: 2427.9

Physical Appearance: White lyophilised solid

Peptide Sequence:

Arg-Tyr-Val-Val-Leu-Pro-Arg-Pro-Val-Cys-
Phe-Glu-Lys-Gly-Met-Asn-Tyr-Thr-Val-Arg

Storage: Desiccate 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: 86% (Remaining weight made up of counterions and residual water).

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:

Charonis et al (1988) A novel synthetic peptide from the B1 chain of laminin with heparin-binding and cell adhesion-promoting activities. *J. Cell Biol.* **107** 1253. PMID: 3417782.

Skubitz et al (1990) Definition of a sequence, RYVVLPR, within laminin peptide F-9 that mediates metastatic fibrosarcoma cell adhesion and spreading. *Cancer Res.* **50** 7612. PMID: 2253210.

Schuger et al (1996) Laminin and heparan sulfate proteoglycan mediate epithelial cell polarization in organotypic cultures of embryonic lung cells: evidence implicating involvement of the inner globular region of laminin β 1 chain and the heparan sulfate groups of heparan sulfate proteoglycan. *Dev. Biol.* **179** 264. PMID: 8873769.

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