

PRODUCT INFORMATION



Heparin-binding Peptide (trifluoroacetate salt)

Item No. 39725

Formal Name:	L-tryptophyl-L-glutaminy-L-prolyl-L-prolyl-L-arginyl-L-alanyl-L-arginyl-L-isoleucine, trifluoroacetate salt	
Synonyms:	Fibronectin Adhesion-promoting Peptide, Fibronectin Peptide V, FN-C/H-V	H-Trp-Gln-Pro-Pro-Arg-Ala-Arg-Ile-OH
Peptide Sequence:	WQPPRARI-OH	• XCF ₃ COOH
MF:	C ₄₇ H ₇₄ N ₁₆ O ₁₀ • XCF ₃ COOH	
FW:	1,023.2	
Purity:	≥95%	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Heparin-binding peptide (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the heparin-binding peptide (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

Heparin-binding peptide is a synthetic peptide fragment corresponding to residues 1,892-1,899 of the C-terminal heparin-binding domain of fibronectin.¹ It induces focal adhesion formation in pre-spread human embryonic fibroblasts (HEFs) when used at concentrations ranging from 1 to 1,000 µg/ml. Heparin-binding peptide inhibits the production of matrix metalloproteinase 1 (MMP-1), MMP-2, and MMP-9 induced by a 40 kDa C-terminal heparin-binding fibronectin fragment (HBFN-f) in isolated human articular cartilage.² It has been used in peptide surface micropatterning for surface endothelialization.³

References

1. Woods, A., McCarthy, J.B., Furcht, L.T., *et al.* A synthetic peptide from the COOH-terminal heparin-binding domain of fibronectin promotes focal adhesion formation. *Mol. Biol. Cell* **4(6)**, 605-613 (1993).
2. Yasuda, T., Poole, A.R., Shimizu, M., *et al.* Involvement of CD44 in induction of matrix metalloproteinases by a COOH-terminal heparin-binding fragment of fibronectin in human articular cartilage in culture. *Arthritis Rheum.* **48(5)**, 1271-1280 (2003).
3. Hoesli, C.A., Tremblay, C., Juneau, P.-M., *et al.* Dynamics of endothelial cell responses to laminar shear stress on surfaces functionalized with fibronectin-derived peptides. *ACS Biomater Sci. Eng.* **4(11)**, 3779-3791 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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