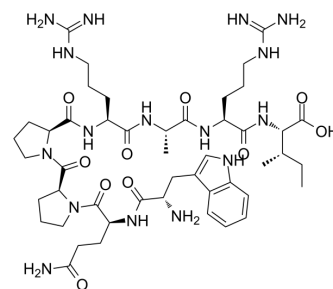


Fibronectin Adhesion-promoting Peptide

Cat. No.:	HY-P0306
CAS No.:	125720-21-0
Molecular Formula:	C ₄₇ H ₇₄ N ₁₆ O ₁₀
Molecular Weight:	1023.19
Sequence:	Trp-Gln-Pro-Pro-Arg-Ala-Arg-Ile
Sequence Shortening:	WQPPRARI
Target:	Others
Pathway:	Others
Storage:	Sealed storage, away from moisture
	Powder -80°C 2 years
	-20°C 1 year



* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 2 mg/mL (1.95 mM; Need ultrasonic and warming)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	0.9773 mL	4.8867 mL	9.7734 mL
		5 mM	---	---	---
		10 mM	---	---	---
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 2 mg/mL (1.95 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	Fibronectin Adhesion-promoting Peptide (Heparin Binding Peptide) is one of the heparin-binding amino acid sequences found in the carboxy-terminal heparin-binding domain of fibronectin. It promotes assembly of mesenchymal stem cell (MSC) spheroids into larger aggregates. Fibronectin Adhesion-promoting Peptide directly promotes the adhesion, spreading, and migration of endothelial cells by reacting with heparin binding domains of cells ^{[1][2]} .
In Vitro	GRGDS and Fibronectin Adhesion-promoting Peptide (Heparin Binding Peptide: WQPPRARI) micropatterns increase the endothelialisation of prosthetic materials in vitro. Fibronectin Adhesion-promoting Peptide also enhances haptotactic cell migration. The anti-apoptotic effects of fibronectin require the presence of the WQPPRARI sequence, which may be due to synergistic survival signals mediated by this sequence and by the RGD motif ^[1] . RDGS and Fibronectin Adhesion-promoting Peptide promote cell adhesion through different activation pathways that

induce different forms of adhesion which can be highlighted through the analysis of focal and fibrillar contacts^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Hoesli CA, et al. A fluorophore-tagged RGD peptide to control endothelial cell adhesion to micropatterned surfaces. *Biomaterials*. 2014 Jan;35(3):879-90.
- [2]. Chollet C, et al. Impact of peptide micropatterning on endothelial cell actin remodeling for cell alignment under shear stress. *Macromol Biosci*. 2012 Dec;12(12):1648-59.
- [3]. Lei J, Murphy WL, et al. Combination of Heparin Binding Peptide and Heparin Cell Surface Coatings for Mesenchymal Stem Cell Spheroid Assembly. *Bioconjug Chem*. 2018 Apr 18;29(4):878-884.
-

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA