

Data Sheet

Product Name:	VPM peptide	
Cat. No.:	CS-0165836	
CAS No.:	1428885-83-9	
Molecular Formula:	C ₆₃ H ₁₀₉ N ₂₅ O ₂₂ S ₄	
Molecular Weight:	1696.95	GCRDVPMSMRGGDRCG
Target:	Others	
Pathway:	Others	
Solubility:	H ₂ O	

BIOLOGICAL ACTIVITY:

VPM peptide is a dithiol protease-cleavable peptide cross-linker. VPM peptide can be incorporated into the backbone of the PEG-diacrylate (PEG-DA) macromer to form PEG hydrogel^{[1][2]}. **In Vitro:** VPM peptide is rapidly cleaved by matrix metalloproteinase (MMP)-1 and MMP-2 proteases^[2].

VPM-crosslinked microgels are degradable by proteases in a concentration-dependent manner^[2].

References:

[1]. Phelps EA, et, al. Maleimide cross-linked bioactive PEG hydrogel exhibits improved reaction kinetics and cross-linking for cell encapsulation and in situ delivery. *Adv Mater.* 2012 Jan 3;24(1):64-70, 2

[2]. Foster GA, et, al. Protease-degradable microgels for protein delivery for vascularization. *Biomaterials.* 2017 Jan;113:170-175.

CAIndexNames:

Glycine, glycyL-L-cysteinyl-L-arginyl-L-α-aspartyl-L-valyl-L-prolyl-L-methionyl-L-seryl-L-methionyl-L-arginylglycylglycyl-L-α-aspartyl-L-arginyl-L-cysteinyl-

SMILES:

[GCRDVPMSMRGGDRCG]

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

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

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