

P8RI

Chemical Properties

CAS No. : 2147724-76-1

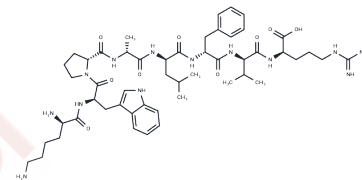
Formula: C51H77N13O9

Molecular Weight: 1016.259

Keep away from moisture

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	P8RI (D-P8RI) is a CD31 biomimetic peptide and agonist targeting the juxtamembrane amino acid sequence of the ectodomain of CD31, restoring the CD31 inhibitory pathway and exhibiting immunosuppressive properties.
Targets(IC50)	VEGFR
In vitro	P8RI (D-P8RI) was engineered as a retro-inverso peptide composed of all-D-amino acids to preserve bioactivity and provide resistance to plasma proteases[1].
In vivo	P8RI, administered at a dosage of 2.5 mg/kg through subcutaneous injections daily from days 7 to 28 following acute aortic dissection and intramural hematoma (ADIM) occurrence, significantly mitigates aneurysmal transformation. This effect is achieved by hastening the resolution of intramural hematomas, fostering collagen production in dissected aortas, and enhancing M2 macrophage enrichment at the injury site in vivo. The efficacy of this treatment was evaluated using an Apo E -/- male mouse model, 28-week-old, with implanted Ang II-releasing pumps—a model designed to simulate experimental acute aortic dissection and intramural hematoma (ADIM). This regimen resulted in a marked reduction of aneurysmal transformation.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.984 mL	4.920 mL	9.840 mL
5 mM	0.1968 mL	0.984 mL	1.968 mL
10 mM	0.0984 mL	0.492 mL	0.984 mL
50 mM	0.0197 mL	0.0984 mL	0.1968 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Diaz-Rodriguez S, et al. Coronary stent CD31-mimetic coating favours endothelialization and reduces local inflammation and neointimal development in vivo. *Eur Heart J.* 2021;42(18):1760-1769.
- Sannier A, et al. A CD31-Derived Peptide Prevents the Development of Antibody-Mediated Lesions in a Rat Model of Aortic Allograft. *Transplant Proc.* 2021;53(2):746-749.
- Andreato F, et al. Macrophage CD31 Signaling in Dissecting Aortic Aneurysm. *J Am Coll Cardiol.* 2018;72(1):45-57.

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