Edratide

Cat. No.:	HY-P3560			
CAS No.:	433922-67-9			
Molecular Formula:	C ₁₁₁ H ₁₄₉ N ₂₇ O ₂₈			
Molecular Weight:	2309.53 مَنْ الْمَالَةُ اللَّهُ اللَّهُ عَلَيْهُ عَلَيْ عَلَيْهُ عَلَيْ عَلَيْ عَلَيْ عَلَيْهُ عَلَيْهُ عَلَيْهُ عَلَيْهُ عَلَيْهُ عَلَيْهُ عَلَيْهُ عَلَيْ عَ			
Sequence:	Gly-Tyr-Tyr-Trp-Ser-Trp-Ile-Arg-Gln-Pro-Pro-Gly-Lys-Gly-Glu-Glu-Trp-Ile-Gly			
Sequence Shortening:	GYYWSWIRQPPGKGEEWIG			
Target:	Apoptosis			
Pathway:	Apoptosis			
Storage:	Sealed storage, away from moisture and light, under nitrogen			
	Powder -80°C 2 years			
	-20°C 1 year			
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture			
	and light, under nitrogen)			

SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (43.30 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg		
		1 mM	0.4330 mL	2.1649 mL	4.3299 mL		
		5 mM	0.0866 mL	0.4330 mL	0.8660 mL		
		10 mM	0.0433 mL	0.2165 mL	0.4330 mL		
	Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (1.08 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (1.08 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (1.08 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description

Edratide (TV 4710) is a synthetic peptide of 19 amino acid based on the complementarity-determining region 1 (CDR1) of a human anti-DNA antibody that expresses a major idiotype denoted 16/6 ld. Edratide reduces the rates of apoptosis (Apoptosis) and down-regulates of caspase-8 and caspase-3, up-regulates Bcl-xL. Edratide has the potential for the research of systemic lupus erythematosus (SLE)^{[1][2][3]}.

Product Data Sheet



SOLUBILITY

In Vivo	Edratide (20-50 μg; s.c.; once a week for 10 weeks) exerts beneficial effects on SLE is through regulation of gene expression ^[2] . Edratide (50 μg/mouse; s.c.; 10 weekly) reduces the rates of apoptosis and down-regulates of caspase-8 and caspase-3, up- regulates Bcl-xL in SLE mouse ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.				
	Animal Model:	6-7 months female mice (with established SLE) ^[2]			
	Dosage:	20-50 µg			
	Administration:	Subcutaneously injection; once a week for 10 weeks			
	Result:	Up-regulated the RNA transcripts of Tnfsf4, Il5ra, Zbtb20, Nid1, down-regulated the transcripts of Tfpi and S100a8.			
	Animal Model:	7-8 months SLE-afflicted BWF1 female mice ^[3]			
	Dosage:	50 μg/mouse			
	Administration:	S.c.; 10 weekly			
	Result:	Reduced apoptosis, down-regulated caspase-8 and caspase-3, and up-regulated Bcl-xL.			

REFERENCES

[1]. Urowitz MB, et al. Safety and efficacy of hCDR1 (Edratide) in patients with active systemic lupus erythematosus: results of phase II study. Lupus Sci Med. 2015 Aug 11;2(1):e000104.

[2]. Elmann A, et al. Altered gene expression in mice with lupus treated with edratide, a peptide that ameliorates the disease manifestations. Arthritis Rheum. 2007 Jul;56(7):2371-81.

[3]. Sharabi A, et al. The role of apoptosis in the ameliorating effects of a CDR1-based peptide on lupus manifestations in a mouse model. J Immunol. 2007 Oct 15;179(8):4979-87.

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

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