

Certificate of Analysis

Product	PT-141	CAS No. :	189691-06-3
Product No.:	PT141	Molecular Formula	C ₅₀ H ₆₈ N ₁₄ O ₁₀
Sequence	Ac-Nle-cyclo(Asp-His-D-Phe-Arg-Trp-Lys)-NH ₂ (Disulfide bond:Cys ₂ -Cys ₇)		
Batch No.	PT141-260601	Quantity	2.0kg
Mfg. Date	May 26th, 2026	Retest Date	May 25th, 2028

【 ITEMS 】	【 SPECIFICATIONS 】	【 RESULTS 】
Appearance	White or almost white lyophilized powder	White lyophilized powder
Solubility	Freely soluble in water	Conforms
Solution clarity and color	Clear and colorless	Conforms
Specific optical rotation [α] _D ²⁰	-50.0° to -60.0° (anhydrous and sodium ion-free substance)	-54.2°
Identification by HPLC	The retention time of the principal peak of the test solution corresponds to that of the reference solution, as obtained in the Assay.	Conforms
Molecular weight (calculated)	1024.22 Da	1024.5 Da (by MS)
pH	5.0~7.0	6.1
Water content(KF)	NMT 5.0%	2.8%
Peptide content (HPLC)	NLT 98.0%	99.3%
Related substances(HPLC)	Any individual impurity: NMT 1.0% Total impurities: NMT 2.0%	0.35% 0.86%
Sodium ion	1.0~2.0%	1.3%
High molecular protein	NMT 1.0%	0.25%
Disulfide bond	Conforms to structure (Cys ₂ -Cys ₇)	Conforms
Amino acid content	Asp: 1.0~2.0 His: 1.0~2.0 D-Phe: 1.0~2.0 Arg: 1.0~2.0 Trp: 1.0~2.0 Lys: 1.0~2.0 Nle: 1.0~2.0 AEEA: Should be detected	1.2 1.1 1.3 1.2 1.1 1.2 1.1 Conforms



Residual solvent	Methylene chloride NMT 600ppm Acetonitrile NMT 410ppm Methyl tert-butyl ether NMT 5000 ppm DMF NMT 880ppm	N.D 25ppm N.D N.D
Peptide content	NLT 98.0%	99.1%
Bacterial endotoxins	NMT 10EU/mg	<3EU/mg
Microbial limits	TAMC NMT 100 cfu/g TYMC NMT 100 cfu/g E. Coli: Absent	<20 cfu/g <20 cfu/g Absent
Assay(C ₅₀ H ₆₈ N ₁₄ O ₁₀)	95.0%~105.0%(Calculated with reference to the anhydrous and sodium ion-free substance.)	100.2%
Storage	Keep in tight container, protect from light, store at a temperature of -20±5°C.	
Report	Li peng	Date 2026.06.03
Reviewer	Fang Hui Liao	Date 2026.06.03
Conclusion: This batch of product complies with Enterprise Standards. 合格		



It is only supplied as chemical product.
It is only for R&D use.

Testing Organization:
Shanghai High Purity Peptide Biotechnology Co., Ltd.
上海高纯肽生物科技有限公司