

Certificate of Analysis

Product	IGF-1 LR3 (Long R3 IGF-1)	CAS No.:	143045-27-6
Product No.:	IG	Molecular Formula	C ₄₀₀ H ₆₁₉ N ₁₁₁ O ₁₁₅ S ₉
Sequence	MFPAMPLLSLFVNGPRTLCAELVDALQFVCGDRGFYFNKPTGYOSSRRAPQTGIVDECCFRSCDLRRLEMYCAPLKPAKSA 83-aa analogue of human IGF-1 (Arg3 substitution + 13-aa N-terminal extension); contains 3 intramolecular disulfide bonds		
Molecular Weight	9111.5	Quantity	2.0g
Batch No.	IG-2613N	Storage Temp.	-20±5°C
Mfg. Date	Jul.20 th , 2026	Retest Date	Jul.20 th , 2028

【ITEMS】		【SPECIFICATIONS】	【RESULTS】
Appearance		White or almost white powder	White powder
Solubility		Soluble in water	Conforms
Solution clarity and color		Clear and colorless liquid	Conforms
Identification	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
	Mass spectrum	9111.5±3.0	9112.6
Amino acid content		Asp: 5.4~6.6	6.0
		Thr: 2.7~3.3	3.0
		Ser: 5.4~6.6	5.8
		Glu: 4.5~5.5	5.0
		Pro: 6.3~7.7	7.0
		Gly: 6.3~7.7	7.0
		Ala: 6.3~7.7	7.0
		Cys: 5.4~6.6	5.6
		Val: 3.6~4.4	4.0
		Met: 2.7~3.3	3.0
		Ile: 0.9~1.1	1.0
		Leu: 8.1~9.9	9.0
		Tyr: 2.7~3.3	3.0
		Phe: 5.4~6.6	6.0
		Lys: 2.7~3.3	3.0
		Arg: 6.3~7.7	7.0
Related substances (HPLC)		Largest single impurity: NMT 1.0%	0.22%
		Total impurities: NMT 2.0%	0.54%
Purity (HPLC)		NLT 99.0%	99.78%
pH		4.0~7.0	5.0
Acid group ions		Trifluoroacetate ion (TFA residue): NMT 1.0%	N.D
		Acetate ion (acetic acid, counter-ion): NMT 15.0%	6.1%
Water content (KF)		NMT 8.0%	3.0%
Peptide content		NLT 80.0%	89.6%
Residual solvent		Acetonitrile NMT 410ppm	228ppm
		Methanol NMT 3000ppm	N.D
		Methyl tert-butyl ether NMT 5000ppm	N.D
Bacterial endotoxins		NMT 10EU/mg	2.5EU/mg
Microbial Limits		Total aerobic bacteria ≤100cfu/g	Conforms
		Mould & Yeast ≤10cfu/g	Conforms
		Bile tolerant enterobacteria: absence in 1g	absent
		Pseudomonas aeruginosa: absence in 1g	absent
		Staphylococcus aureus: absence in 1g	absent

Assay	95.0%~105.0% (Calculated on anhydrous, acetate-free basis)	97.3%
Storage	Keep in light container, protect from light, store at a temperature of -20±5°C.	
Report	QC01	Date: Jun. 29 th . 2026
Reviewer	QC02	Date: Jun. 29 th . 2026
Conclusion: This batch of product complies with Enterprise Standard.		

合格

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