

CERTIFICATE OF ANALYSIS

Base Peptides - Sample Quality Document

Product	IGF-1 LR3	Lot No.	BP-IGF1L-2604-124
CAS No.	946870-92-4	Report No.	COA-2604-024
Formula	83-aa protein analog	Mfg. Date	2026-04-18
Molecular Weight	~9111.6 Da	Retest Date	2028-04-17
Specification	1 mg/vial	Storage	-20 C, protected from light and moisture

Sequence / structural descriptor: Long R3 insulin-like growth factor-1 analog; identity by intact mass and peptide map

Test	Method	Specification	Result	Status
Appearance	Visual inspection	White to off-white lyophilized powder or cake; product-specific color acceptable	Conforms	Pass
Identity	LC-MS / peptide map	Consistent with IGF-1 LR3 reference standard	Conforms	Pass
Molecular ion	ESI-MS	Expected: ~9111.6 Da	Observed within method tolerance	Pass
Purity	RP-HPLC, 214 nm	>= 98.0% area	99.38%	Pass
Peptide content / assay	HPLC/UV vs standard	95.0 - 105.0% of label claim	101.2%	Pass
Water content	Karl Fischer	<= 6.0%	2.0%	Pass
Residual TFA	Ion chromatography	<= 0.25%	0.03%	Pass
Acetate / counter-ion	Ion chromatography	Report result	7.0%	Pass
Bacterial endotoxin	LAL chromogenic	<= 0.5 EU/mg	0.05 EU/mg	Pass
Bioburden	USP <61>	<= 100 CFU/g	<10 CFU/g	Pass
Heavy metals	ICP-MS screen	Pb, Cd, As, Hg each <= 1 ppm	Each <0.1 ppm	Pass
Fill verification	Gravimetric / assay calc.	Meets 1 mg/vial nominal	100.6% of nominal	Pass

Conclusion: The sample batch meets the listed example specifications for identity, purity, assay, residuals, microbial limits, endotoxin, and heavy metals. Analytical results are representative examples for template recreation. Actual release COAs require batch-specific testing, controlled reference standards, validated methods, authorized review, and traceable raw data.

Prepared by	QA Review	Authorized Release
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