



## Certificate of Analysis

### Long R3-IGF-1

**Product Name** : Long R3-IGF-1  
**Mfg. Date** : Jun 11, 2024  
**MF** :  $C_{400}H_{625}N_{111}O_{115}S_9$   
**CAS No.** : 143045-27-6  
**Sequence** : MFPAMPLSSLFVNGPRTL CGAELVDALQFVCGDRGFYFNKPTGYGSSSRAPQTGIVDE  
CCFRSCDLRRLEMYCAPLPAKSA  
**Source** : *E. coli* Recombinant

**Lot No.** : DL8394  
**Exp. Date** : Jun 10, 2027  
**MW** : 9112  
**Batch Qty** : 25 g

TESTS	SPECIFICATIONS		RESULTS
Appearance	White powder		White powder
Molecular Weight (Da)	9112 $\pm$ 1		9112
Bioactivity (IU/ml Murine BALB/C3T3 Cells Proliferation Assay) (CP2020)	---		$2.0 \times 10^5$
Concentration (mg/ml) (Lowry Method)	---		1.0%
Specific Activity (IU/mg) (CP2020)	$\geq 1.0 \times 10^5$ IU/mg		$2.0 \times 10^5$ IU/mg
Peptide Purity (CP2020)	SDS-PAGE	$\geq 95.0\%$	98.5%
	RP-HPLC	$\geq 95.0\%$	97.4%
Protein Content (N%)	$\geq 20.0\%$		20.4%
Residual Solvent (GC)	Formaldehyde	Negative	Negative
Bacterial Endotoxin (USP2022)	$\leq 10$ EU/mg		< 10 EU/mg
Microbial Limits (USP2022)	Total Aerobic Microbial Count	$\leq 10^2$ CFU/g	< 20 CFU/g
	Total Yeast and Mold Count	$\leq 10^2$ CFU/g	< 20 CFU/g
	<i>E. coli</i>	Absent	Absent
Conclusion: The product meets the In-House specifications. Long Term Storage: Store in a sealed container at 2 - 8°C in the fridge or in the freezer. Special Labeling Requirement: Not for any application use without sterile processing. Distributed by Darmerica.			

Note: Analytical results transcribed from the original COA provided by Shaarxi MingDeRun Pharmatech Co., Ltd. (China); Lot No. LI05-20240611007.

Based on the review of above information, the lot stands released.

	Name	Title	Signature	Date
Prepared by	Kamlesh Mistry	Quality Manager		12/10/2024
Released by	Christina Boykin	Quality Supervisor		12/10/2024