

Certificate of Analysis

Product Information

- Product Name:** Human Chorionic Gonadotropin (HCG)
- CAS Number:** 9002-61-3
- Molecular Formula:** C₁₁O₅H₁₇70N₃18O₃36S₂6
- Molecular Weight:** ~36,700 g/mol
- Appearance:** White to off-white lyophilized powder

Batch Information

- Batch / Lot Number:** HCG-2025-003
- Quantity:** 10,000IU
- Date of Manufacture:** 08-Sep-2025
- Retest Date:** 08-Sep-2027
- Storage Conditions:** -20 °C, dry and protected from light

Analytical Results

Test	Specification	Result	Method
Identity (SDS-PAGE / ELISA)	Consistent with reference HCG protein	Confirmed	SDS-PAGE / ELISA
Potency (Bioassay)	≥ 10,000 IU per vial	10,200 IU	In vitro bioassay
Purity (HPLC)	≥ 95.0 % (by area)	97.5 %	RP-HPLC
Appearance	White to off-white lyophilized powder	White powder	Visual
Solubility	Soluble in sterile water (≥1 mg/mL)	Pass	Visual
Residual Solvent (if applicable)	≤ 0.5 %	<0.1 %	GC
Water Content (Karl Fischer)	≤ 5.0 %	2.8 %	KF titration
Protein Content	Report only	3.5 mg per vial	UV Spectroscopy
Endotoxin	< 5 EU/mg	0.9 EU/mg	LAL test
Microbial Limit Test	<100 CFU/g, no pathogens	Pass	USP <61>/<62>

Compliance Statement

The above batch of **Human Chorionic Gonadotropin (HCG)** complies with the stated specifications. This batch of **Human Chorionic Gonadotropin (HCG)** meets all specified analytical and microbiological criteria and is suitable **for research use only**. Manufactured and tested under controlled conditions to ensure consistency, potency, purity, and integrity.