

Recombinant Human IGF-I / Insulin-Like Growth Factor I,

Animal Free & Carrier Free

Cat #: C-CYP328

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

Insulin-like growth factor 1 (IGF-1), also called somatomedin C, is a protein that in humans is encoded by the IGF1 gene. IGF-1 is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. A synthetic analog of IGF-1, mecasermin, is used for the treatment of growth failure.

Product Information

Source: *Escherichia Coli*.

Purity: >95% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measure by its ability to induce MCF-7 cells proliferation. The ED50 for this effect is 0.9-3.1ng/mL.

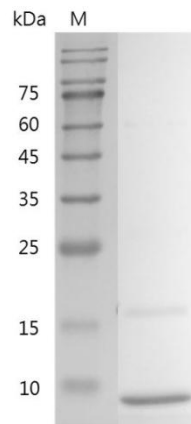
The specific activity of recombinant human IGF- I is approximately $>1.2 \times 10^3$ IU/mg.

Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

Amino acid sequence: MGPETLCGAEILDALQFVCGDRGFYFNKPTGYGSSRRAPQTGIVDECCFRSCDLRRLRLEMYCAPLKPAKSA

with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1xPBS, pH 7.4.



SDS-PAGE analysis of recombinant human IGF-I

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.