

Recombinant Human IGF-I

Recombinant Protein

Product Information

Product No.: I-180

Former QED Product No.: 20802P

Storage: -20°C to -70°C

Product Description

Background:

IGFs (Insulin-like growth factors) are polypeptide growth factors that prompt cell growth and survival. Produced primarily by the liver, they affect muscle, bone, and cartilage tissues. As part of the insulin gene family, IGFs are structurally similar to insulin but possess greater growth-promoting activity. IGF-I and IGF-II are regulated by growth hormone and placental lactogen, respectively. They signal via the tyrosine kinase type I receptor and are created from inactive precursor proteins through proteolytic processing. This process involves the removal of N-terminal and C-terminal propeptide regions, transforming them into their mature, active forms. The IGFs' ability to stimulate proliferation makes them crucial for various developmental and regenerative processes in the body. The IGF-I protein associates with IGF binding proteins thereby increasing its plasma half life and modulating its interactions with receptors.

Known Reactivity Species:

Human

Expression Host:

E. coli Cells

Formulation

This recombinant protein was 0.2 µm filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1X PBS) pH 7.2 – 7.3 with no calcium, magnesium, or preservatives present.

Purity

>97% by SDS-PAGE and analyzed by silver stain.

Endotoxin

<0.1 EU/µg as determined by the LAL method

Storage and Stability

This lyophilized protein is stable for six to twelve months when stored desiccated at -20°C to -70°C. After aseptic reconstitution, this protein may be stored at 2°C to 8°C for one month or at -20°C to -70°C in a manual defrost freezer.

Avoid Repeated Freeze Thaw Cycles

Country of Origin

USA