

## Recombinant Human Insulin-Like Growth Factor I (rHuIGF-1)

### ORDERING INFORMATION

**Catalog nos.:** 20802P-100 100ug  
20802P-500 500ug  
20802P-1000 1000ug

**Format:** Produced in *E. coli* as a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.6kDa. Purified by proprietary chromatographic techniques. Lyophilized from a 0.2µm-filtered concentrated solution in PBS, pH 7.0.

### BACKGROUND

Insulin-like growth factors (IGFs) comprise a family of peptides that play important roles in mammalian growth and development. IGF1 mediates many of the growth-promoting effects of growth hormone. Early studies showed that growth hormone did not directly stimulate the incorporation of sulfate into cartilage, but rather acted through a serum factor, termed 'sulfation factor,' which later became known as 'somatomedin' (Daughaday et al., 1972). Three main somatomedins have been characterized: somatomedin C (IGF1), somatomedin A (IGF2), and somatomedin B.

### SPECIFICATION SUMMARY

**Source:** *Escherichia coli*

**Purity:** Greater than 98% by RP-HPLC and SDS-PAGE.

**Amino Acid Sequence:** GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSRRAPQ  
TGIVDECCFR SCDLRRLEMY CAPLKPAKSA.

**Biological Activity:** The ED<sub>50</sub> as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 1.0ng/ml, corresponding to a specific activity of  $\geq 1 \times 10^6$  units/mg.

### STORAGE AND STABILITY

Although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution, IGF1 should be stored at 4°C between 2-7 days and for future use below -18°C. Addition of a carrier protein (such as 0.1% HAS or BSA) is recommended for long-term storage. Avoid multiple freeze-thaw cycles.

*For in vitro investigational use only. Not intended for therapeutic or diagnostic procedures.*