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## Certificate of Analysis

### IGF-I (resistant to IGF-BPs)

(recombinant protein expressed in *E. coli*)

Catalog # 01-189

Lot # 22678

**Product Description:** Recombinant human IGF-I (E3R) expressed in *E.coli*. IGF-I (E3R) (insulin-like growth factor I) is a 70 amino acid analog of human IGF-I with the substitution of an Arg for Glu at position 3. IGF-I (E3R) is significantly more potent than IGF-I *in vitro* and *in vivo* because IGF-I (E3R) has decreased binding to all IGF binding proteins.

**Purity:** >95% by HPLC. Purified by liquid chromatography. MW = 7.6kDa.

**Sterility:** Filtered through a 0.2 $\mu$  membrane and packaged aseptically.

**Storage and Stability:** Lyophilized: Stable for 2 years at 4°C from date of shipment. Rehydrated: Stable for 3 months at -20°C or -80°C. More dilute solutions are less stable at -20°C. Aliquot rehydrated solutions to avoid repeated freezing and thawing.

**Quantity:** 25 $\mu$ g/vial of lyophilized powder. Lyophilized from 100 $\mu$ l 0.1M acetic acid.

**Rehydration:** In 100mM acetic acid or 10mM HCl. When preparing solutions at concentrations of <1mg/ml add a carrier protein to minimize adsorption of peptide to plastic or glass surfaces. Use RIA grade bovine serum albumin at concentrations between 0.1 and 1mg/ml. For use in the presence of fetal bovine serum in cell culture, no carrier protein is necessary.

**FOR IN VITRO RESEARCH USE ONLY  
NOT FOR USE IN HUMANS OR IN ANIMALS**

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### Quality Control Testing and Research Applications

**Biological Activity:** Stimulation of protein synthesis in L6 myoblasts: ED<sub>50</sub> = 0.9ng/ml. This lot at 5ng/ml stimulated incorporation of [<sup>3</sup>H] thymidine in chick embryo fibroblast cells 1.6-fold over background.

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#### References:

1. Lowe, W.L., In: Insulin-Like Growth Factors: Molecular and Cellular Aspects LeRoith, D., CRC Press Inc. Boca Raton, p49, 1991.
2. LeRoith, D., and C.T. Roberts Jr., Ann. New York Acad. Sci. **692**: 1, 1993.
3. Francis, G.L., J. Mol. Endocrinol. **8**: 213-223, 1992.