

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant LR3-IGF-I (Receptor Grade), Human

Catalog Number: BK0123-1mg

Source: Escherichia coli.

Quantity: 1mg

### Description:

IGF-1 is a well-characterized basic peptide secreted by the liver that circulates in the blood. It has growth-regulating, insulin-like, mitogenic activities. IGF-1 is a growth factor that has a major, but not absolute, dependence on somatotropin. It is believed to be mainly active in adults in contrast to IGF-2, which is also a major fetal growth factor. Human Long R3 Insulin-like Growth Factor-1 (rhLR3IGF-1) contains an 83 amino acid analog of human IGF-I. Compared to the complete human IGF-I sequence, an addition of the rhLR3IGF-1 includes the substitution of an Arg for the Glu at position 3 (hence R3) and a 13 amino acid extension peptide at the N-terminus. An enhanced potency is due to the markedly decreased binding of human Long-R3-IGF-I to IGF binding proteins which normally inhibit the biological actions of IGFs. RhLR3IGF-1 is properly folded under oxidizing conditions and then purified by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

9.1 ± 0.9 KDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE.

### Biological Activity:

ED50 < 10 ng/ml, measured by the dose-dependent proliferation of CHO cells, corresponding to a specific activity of  $>1.0 \times 10^5$  units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after dissolved in 48% acetonitrile and 0.1% TFA

### AA Sequence:

MFPAMPLSSLFVNGPRTL CGAELVDALQFVCG-  
DRGFYFNKPTGYGSSRRAPQTGIVDEC-  
CFRSCDLRRLEMYCAPLPAKSA

### Endotoxin:

< 1 EU/μg, determined by LAL method.

### Reconstitution:

Reconstituted in 10mM HCl at 1mg/ml. Use a 0.22 μm membrane for filter Sterilization.

### Storage:

Lyophilized recombinant human Long R3 Insulin-like Growth Factor-1 (rhLR3IGF-1) remains stable up to 6 months at -80 °C from date of receipt. Stock solution of peptide can be stored at least 3 months at -20 °C. Avoid repeated freeze-thaw cycles.

### Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.