

## Human LR3 IGF-I Rapid ELISA Kit

**Catalog No.**

BEK-2233-1P

**Quantity:**

1 x 96 tests

**Description:**

Human LR3 insulin-like Growth Factor-I (LR3 IGF-I) was developed specifically for supplementation of mammalian cell culture to support the survival and proliferation of cells. It is an 83 amino acid analogue of IGF-I comprising the complete human IGF-I sequence with the substitution of an Arginine for the Glutamine at position 3, plus a 13 amino acid extension peptide at the N-terminus. It is engineered to have a higher biological potency than native IGF-I or IGF-II and has several advantages over recombinant insulin. Supplementation of cell cultures with LR3IGF-I at a much lower concentration results in equivalent or better productivity than supplementation with standard concentrations of insulin. LR3 IGF-I is better able to stimulate the type I IGF receptor and thus induce a higher level of activation of intracellular signaling molecules, which are responsible for promoting cell survival by inhibition of apoptosis.

The LR3 IGF-I Rapid ELISA kit consists of a complete set of reagents and pre-coated plate to allow immediate assay of LR3 IGF-I in culture media. Included in the kit are mouse monoclonal anti- LR3 IGF-I capture antibody pre-coated onto an ELISA plate, standard LR3 IGF-I protein, a biotinylated anti-LR3 IGF-I detection antibody and horseradish peroxidase (HRP)-conjugated streptavidin. The addition of a substrate (3,3',5,5'-tetramethylbenzidine, TMB) yields a colored reaction product which is directly proportional to the concentration of LR3 IGF-I present in samples and the supplied protein standard.

The LR3 IGF-I Rapid ELISA kit has been developed, optimized and validated to quantify LR3 IGF-I protein in cell culture medium and is likely to be used during downstream processing of media following a production cycle and is not intended for other use.

**Specificity:**

Human LR3 IGF-I and IGF-I

**Range:**

3.1 - 200 ng/ml

**Sensitivity:**

Typical limit of detection (LOD) for LR3 IGF-I was found to be 1 ng/ml, which was defined as 150% of the blank value.

**Samples:**

Serum, Plasma, Cell culture supernatants

**Sample Size:**

100 µl

**Reagents Included:**

1. 96 well plate coated with LR3 IGF-I Capture Antibody
2. Recombinant LR3 IGF-I Standard
3. Biotinylated LR3 IGF-I Detection Antibody
4. Streptavidin-HRP Concentrate
5. TMB Substrate Reagent
6. Assay Diluent
7. Wash Buffer
8. Stop Solution
9. Plate Sealer

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



® **Cell Sciences**®  
65 Parker Street  
Unit 11  
Newburyport, MA 01950

Toll Free: 888-769-1246  
Phone: 978-572-1070  
Fax: 978-992-0298

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)