

## Recombinant Human IGF-BP5

**CATALOG #:** 4723-25 25 µg  
4723-1000 1 mg

**LOT #:** \_\_\_\_\_

**SOURCE:** *E. coli*

**PURITY:** >98% by SDS-PAGE and HPLC analyses  
Endotoxin level is <0.1 ng per µg of IGF-BP5.

**MOL. WEIGHT:** 28.6 kDa

**FORM:** Sterile filtered and lyophilized from 10 mM Sodium Citrate solution, pH 3.0.

### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. The solution can then be diluted into other aqueous buffers and store at 4°C for 1 week or – 20°C for future use.

### STORAGE CONDITIONS:

The lyophilized protein is best-stored desiccated below 0°C. Reconstituted IGF-BP5 should be stored at working aliquots at -20°C.

### DESCRIPTION:

Human IGF-BP5 is a 28.6 kDa cysteine-rich secreted protein produced by vascular smooth muscle cells. It is the major IGF-binding protein present in bone tissue and helps potentiate the action of IGF-I on smooth muscle cells, fibroblasts or osteoblasts. Studies show that IGF-BP5 acts as a growth inhibitor and pro-apoptotic agent in breast cancer cells. IGF-BP5 overexpressing mice show an increase in neonatal mortality, reduced female fertility, whole body growth inhibition, and retarded muscle development. Recombinant human IGF-BP5 is a 28.6 kDa protein consisting of 253 amino acid residues.

### BIOLOGICAL ACTIVITY:

The ED<sub>50</sub> as determined by its ability to inhibit IGF-II induced proliferation of MCF-7 is ≤0.3 µg/ml, in the presence of 15 ng/ml of human IGF-II.

### RELATED PRODUCTS:

#### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptotic Cell Isolation Kit

#### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

#### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

#### Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

#### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

#### Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay Kit
- Total Cholesterol Quantification Kit

#### Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

#### Growth Factors and Cytokines

Quality Antibodies for Apoptosis and Signal Transduction Molecules