

# Recombinant Human BMP-14

**CATALOG #:**

4580-10	10 µg
4580-50	50 µg
4580-1000	1 mg

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

**SOURCE:** *E. coli*

**PURITY:** >98% by SDS-PAGE and HPLC analyses  
Endotoxin level is <0.1 ng per µg of BMP-14.

**FORM:** Lyophilized from 10 mM Sodium Citrate, pH 3.5.

## RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute to a concentration of 0.1-1.0 mg/ml in water containing BSA (50 µg BSA per 1 µg of protein). This solution can then be diluted into other aqueous buffers and stored 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 BMP-14 should be stored in working aliquots at -20°C.

## DESCRIPTION:

BMPs (bone morphogenetic proteins) belong to the TGF-β superfamily of structurally related signaling proteins. As implied by their name, BMPs promote and regulate bone development, growth, remodeling and repair, in both prenatal development and postnatal growth of eye, heart, kidney, skin, and other tissues. In addition to its osteogenic activity, BMP-14 is a principal inhibitor of cartilage development and is predominantly expressed in long bone during human embryonic development. Recombinant human BMP-14 is a 27 kDa homodimeric protein consisting of two 120 amino acid polypeptide chains.

## BIOLOGICAL ACTIVITY:

The ED<sub>50</sub> as determined by its ability to induce alkaline phosphatase production by ATDC-5 chondrogenic cells is 1-2 µg/ml.

**USAGE:** For Research Use Only. Not for use in humans.

## 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
- Apoptosis siRNA Vectors

### 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

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- 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

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- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

### Signal Transduction

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

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- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
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- 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

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