



# Recombinant Protein Technical Manual

## Recombinant Human/Mouse/Rat/Rhesus/Canine BMP-2 Protein (Active) RPES1020

### Product Data:

**Product SKU:** RPES1020

**Size:** 5µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_001191.1

### Protein Information:

**Molecular Mass:** 13 kDa

**AP Molecular Mass:**

**Tag:**

**Bio-activity:** Measured by its ability to induce alkaline phosphatase production by MC3T3-E1 mouse osteoblastic cells. The ED50 for this effect is typically 0.5-2 µg/ml.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 30 % CAN, 0.1 % TFA, pH 2.9.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** BDA2;BDA2A;BMP-2;BMP2A;BMP2

## Immunogen Information:

**Sequence:** Gln283-Arg396

## Background:

BMP-2 protein, like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. BMP-2 protein is involved in the hedgehog pathway, TGF beta signaling pathway, and cytokine-cytokine receptor interaction. BMP-2 and BMP-7 are osteogenic BMPs that have been demonstrated to potently induce osteoblast differentiation in a variety of cell types. BMP-2, BMP-4 and BMP-7 are known to be of major importance in bone formation and repair. In cancerous tissues BMP-2 protein may play an important role in the progression of glioma.