

## Recombinant Human BMP-2 Protein(Trx Tag)

Catalog Number: PDEH100510

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

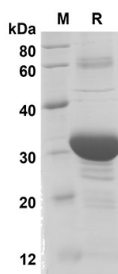
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human BMP-2 protein Gln283-Arg396, with an N-terminal Trx
<b>Calculated MW</b>	32.4 kDa
<b>Observed MW</b>	32 kDa
<b>Accession</b>	P12643
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 90% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



SDS-PAGE analysis of Human BMP-2 proteins, 2 µg/lane of  
Recombinant Human BMP-2 proteins was resolved with  
SDS-PAGE under reducing conditions, showing bands at  
32.4 KD

### Background

Bone morphogenetic protein-2 (BMP-2) is a member of the transforming growth factor-beta (TGFB) superfamily. BMP2 is synthesized as a 60 kDa precursor that is processed in the secretory pathway to a small 18 kDa monomer, 2 monomers then associate to form the active 30 kDa homodimer, which binds to its receptor. There is also a 40-45 kDa form of BMP2, as an amino-terminal propeptide. BMP2 can induce bone formation and regeneration during early embryonic development. It is involved in the hedgehog pathway, TGF beta signaling pathway, and cytokine-cytokine receptor interaction.

### For Research Use Only