Recombinant Human BMP-2 Protein(Sumo Tag)

Catalog Number: PDEH100503

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

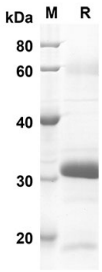
Description

Species	Human
Source	E.coli-derived Human BMP-2 protein Gln283-Arg396, with an N-terminal Sumo
Calculated MW	25.4 kDa
Observed MW	31 kDa
Accession	P12643
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	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 25.4 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.

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