

Product datasheet for **TP728159M**

Recombinant BMP-5 (Bone morphogenetic protein-5), Human

Product data:

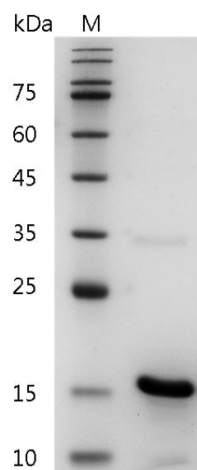
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| Product Type: | Recombinant Proteins |
| Description: | Recombinant BMP-5 (Bone morphogenetic protein-5), Human |
| Species: | Human |
| Expression Host: | E. coli |
| Expression cDNA Clone or AA Sequence: | MAANKRKNQNRNKSSSHQDSSRMSSVGDYNTSEQKQACKKHELYVSRDLGWQDWIIAPEGYAAFYCD GECFPLNAHMNATNHAIVQTLVHLMFPDHPKPCCAPTKLNAISVLYFDDSSNVILKKYRNMWVRSCGC H with polyhistidine tag at the C-terminus. |
| Tag: | His Tag (C-term) |
| Predicted MW: | The protein has a calculated MW of 16.57 kDa. The protein migrates as 17 kDa under reducing condition (SDS-PAGE analysis). |
| Purity: | >98% as determined by SDS-PAGE. |
| Buffer: | The protein was lyophilized from a 0.2 µm filtered solution containing 20 mM sodium citrate, 0.2 M NaCl, pH 3.5. |
| Bioactivity: | Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED ₅₀ for this effect is <0.17 µg/mL. |
| Endotoxin: | <0.1 EU per 1 µg of the protein by the LAL method. |
| Reconstitution Method: | Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein. |
| Applications: | Cell culture |
| Storage: | Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles. |
| UniProt ID: | P22003 |



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Summary:

Bone Morphogenetic Protein-5 (BMP-5) is an extracellular multifunctional signaling cytokine that is also a member of the TGF- β family. BMP-5 can bind with TGF- β receptors and trigger SMAD protein signal transduction. It is involved in many negatively regulated physiological processes, such as the aldosterone biosynthetic process and epithelial to mesenchymal transition. BMP-5 also plays a vital role in cartilage synthesis.

Product images:

SDS- PAGE analysis of recombinant human BMP-5