

## Product datasheet for **TP728164**

### Recombinant BMP-9 (Bone morphogenetic protein-9), Human

#### Product data:

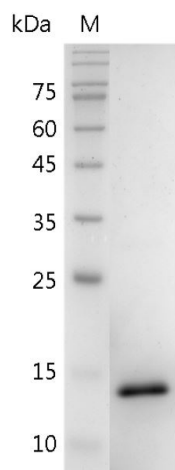
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|--|---|
| <b>Product Type:</b>                         | Recombinant Proteins  |
| <b>Description:</b>                          | Recombinant BMP-9 (Bone morphogenetic protein-9), Human   |
| <b>Species:</b>                              | Human   |
| <b>Expression Host:</b>                      | E. coli   |
| <b>Expression cDNA Clone or AA Sequence:</b> | SAGAGSHCQKTSLRVNFEDIGWDSWIIAPKEYEAYECKGGCFFPLADDVTPTKHAIVQTLVHLKFPTKVGK ACCVPTKLSPISVLYKDDMGVPTLKHYH YEGMSVAECGCR with polyhistidine tag at the N-terminus.   |
| <b>Tag:</b>                                  | His Tag (N-term)  |
| <b>Predicted MW:</b>                         | The protein has a calculated MW of 12.89 kDa. The protein migrates as 16 kDa under reducing condition (SDS-PAGE analysis).  |
| <b>Purity:</b>                               | >98% as determined by SDS-PAGE.   |
| <b>Buffer:</b>                               | The protein was lyophilized from a 0.2 µm filtered solution containing 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.  |
| <b>Bioactivity:</b>                          | Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED <sub>50</sub> for this effect is <0.4 ng/mL.  |
| <b>Endotoxin:</b>                            | <0.01 EU per 1 µg of the protein by the LAL method.   |
| <b>Reconstitution Method:</b>                | Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H <sub>2</sub> 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. |
| <b>Applications:</b>                         | Cell culture  |
| <b>Storage:</b>                              | 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.                        |
| <b>UniProt ID:</b>                           | <a href="#">Q9UK05</a>  |
| <b>Synonyms:</b>                             | NAP-1   |



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**Summary:**

Bone Morphogenetic Protein-9 (BMP-9), known as Growth differentiation factor 2 (GDF2), is an extracellular multifunctional cytokine that is also a member of the TGF- $\beta$  family. BMP-8B can bind with the TGF- $\beta$  receptor and trigger SMAD protein signal transduction. BMP-9 is the most effective for the differentiation of osteoblasts in vivo, and the general BMP blocker does not affect it.

**Product images:**

SDS- PAGE analysis of recombinant human BMP-9