

## Product datasheet for TP728158S

#### OriGene Technologies, Inc.

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## Recombinant BMP-4 (Bone morphogenetic protein-4), Human

**Product data:** 

**Product Type: Recombinant Proteins** 

Recombinant BMP-4 (Bone morphogenetic protein-4), Human **Description:** 

Species: Human **Expression Host:** E. coli

**Expression cDNA Clone** 

MKKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNSTNHAIVQTLVNSVNSSIPK or AA Sequence: ACCVPTELSAISMLYLDEYDKVVLKNYQEMVVEGCGCR with polyhistidine tag at the C-terminus.

Tag: His Tag (C-term)

Predicted MW: The protein has a calculated MW of 12.88 kDa. The protein migrates as 12 kDa under

reducing condition (SDS-PAGE analysis).

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

**Buffer:** The protein was lyophilized from a 0.2 µm filtered solution containing 20 mM sodium

carbonate, pH 9.0.

**Bioactivity:** Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED₅₀ for

this effect is <0.58 ng/mL.

**Endotoxin:** <0.1 EU per 1 µg of the protein by the LAL method.

Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the **Reconstitution Method:** 

> 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.

**Applications:** Cell culture

Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to Storage:

> 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:** P12644

BMP-2B, DVR4 Synonyms:

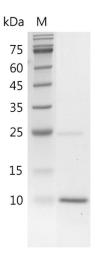




#### **Summary:**

Bone Morphogenetic Protein-4 (BMP-4) is an extracellular multifunctional signaling cytokine that is also a member of the TGF- $\beta$  family. BMP-4 can bind with the TGF- $\beta$  receptor and trigger SMAD protein signal transduction. BMP-4 has a significant expression in the prostate, it plays a vital role in the development of mesoderm into bones and the development of the epidermis and Dorsal-Ventral axis.

# **Product images:**



SDS- PAGE analysis of recombinant human BMP-