

# Human BMP-9, His Tag, E. coli

Catalog Number LDG107PHE

**Package** 5 μg / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



## **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His Tag (N-term)

**Purity** 

>98% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED $_{50}$  for this effect is <0.4 ng/mL.

Form

Lyophilized

**Expression System** 

Escherichia coli

**Storage Buffer** 

Lyophilized from a 0.2  $\mu m$  filtered solution containing 20 mM sodium citrate and 0.2 M NaCl, pH 4.5.

Molecular weight

The protein has a calculated MW of 12.89 kDa. The protein migrates as 13 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin Level** 

<0.01 EU per 1  $\mu g$  of the protein by the LAL method.

**Background** 



#### **Background**

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.

#### **Synonyms**

Bone morphogenetic protein 9, BMP-9, Growth/differentiation factor 2

#### **Uniprot ID**

#Q9UK05

#### **Sequence Note**

Ser320-Arg429

### Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not less than 200  $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

# **Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

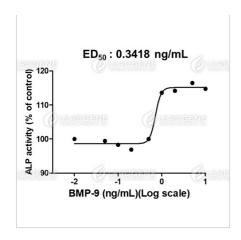
### **Stability & Storage**

This product is stable after storage at:

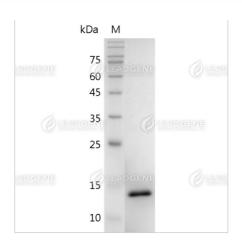
- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

### **Image**



Human BMP-9, His Tag, E. coli (LDG107PHE) induced alkaline phosphatase production by ATDC5 cells, with the ED50 at 0.3418 ng/mL.



SDS-PAGE analysis of recombinant human BMP-9.

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