

Human BMP-14, His Tag, E. coli

Catalog Number LDG112PHE

 $5~\mu g$ / $20~\mu g$ / $100~\mu g$ / Customized package **Package**

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



Specifications

Species of Origin

Human

Affinity Tag

His Tag (C-term)

Purity

>98% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED₅₀ for this effect is <14 ng/mL.

Form

Lyophilized

Expression System

Escherichia coli

Storage Buffer

Lyophilized from a 0.2 µm filtered solution containing 20 mM sodium citrate and 0.2 M NaCl, pH 4.5.

Molecular weight

The protein has a calculated MW of 14.52 kDa. The protein migrates as 18 kDa under reducing condition (SDS-PAGE analysis).

Endotoxin Level

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

Background



Background

Bone Morphogenetic Protein-14 (BMP-14), known as Growth differentiation factor 5 (GDF5), is an extracellular multifunctional cytokine that is also a member of the TGF β family. BMP-14 can bind with the TGF β receptor and trigger SMAD protein signal transduction. BMP-14 plays a role in skeletal and joint development and increases the survival of neurons that respond to the neurotransmitter dopamine.

Synonyms

Bone morphogenetic protein 14, BMP-14, Cartilage-derived morphogenetic protein 1, CDMP-1, Lipopolysaccharide-associated protein 4, LAP-4, LPS-associated protein 4, Radotermin, Growth/differentiation factor 5

Uniprot ID

#P43026

Sequence Note

Ala382-Arg501

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not less than 200 μ 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.

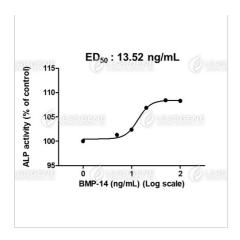
Stability & Storage

This product is stable after storage at:

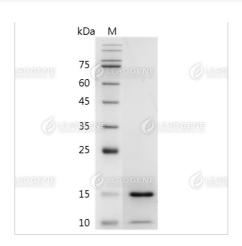
- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

Image



Human BMP-14, His Tag, E. coli (LDG112PHE) induced alkaline phosphatase production by ATDC5 cells, with the ED50 at 13.52 ng/mL.



SDS-PAGE analysis of recombinant human BMP-14.

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