

Product datasheet for **TP728154**

Recombinant BMP-14 (Bone morphogenetic protein-14), Human

Product data:

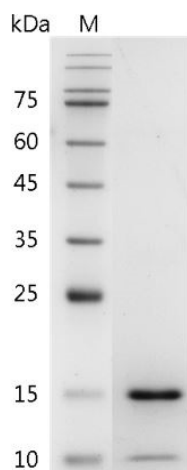
Product Type:	Recombinant Proteins
Description:	Recombinant BMP-14 (Bone morphogenetic protein-14), Human
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MAPLATRQGKRPSKLNKARCSRKALHVNFKDMGWDDWIIAPLEYEAFHCEGLCEFPLRSHLEPTNHAVIQ TLMNSMDPESTPPTCCVPTRLSPISILFIDSANNVVKQYEDMVVESCGR with polyhistidine tag at the C-terminus.
Tag:	His Tag (C-term)
Predicted MW:	The protein has a calculated MW of 14.52 kDa. The protein migrates as 18 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 <14 ng/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:	P43026
Synonyms:	Cartilage-Derived Morphogenetic Protein-1,Growth/Differentiation Factor-5,GDF-5, CDMP-1



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Summary:

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.

Product images:

SDS- PAGE analysis of recombinant human BMP-14