Active Recombinant Human BMP4 Protein (Lys303-Arg408), GMP Grade, Animal-Free

Cat. No. BMP4-35HG **Lot. No.** (See product label)

SPECIFICATION

Product Overview	GMP recombinant human BMP-4 protein (Lys303-Arg408) without tag was expressed in E. coli, produced in an Animal-Free laboratory and manufactured and tested under cGMP guidelines.
Species	Human
Source	E.coli
ProteinLength	Lys303-Arg408
Description	This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein regulates heart development and adipogenesis. Mutations in this gene are associated with orofacial cleft and microphthalmia in human patients. The encoded protein may also be involved in the pathology of multiple cardiovascular diseases and human cancers.
Form	Disulfide-linked homodimer
Bio-activity	Measured by its ability to induce BMP responsive SEAP reporter activity in HEK293 human embryonic kidney cells. The ED50 for this effect is 3-21 ng/mL.

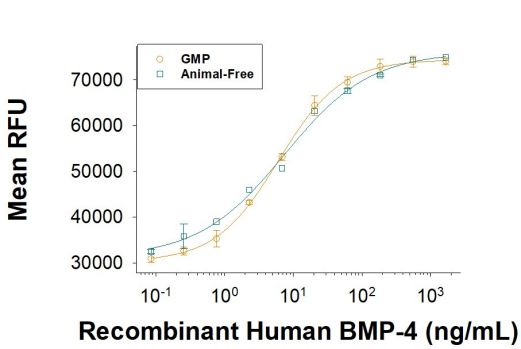
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Molecular Mass	Predicted Molecular Mass: 12 kDa SDS-PAGE: 8-9 kDa, reducing conditions
N-terminal Sequence Analysis	Identity was confirmed by mass spectrometry
Endotoxin	<0.10 EU/ μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. A minimum of 12 months when stored at ≤ -20 centigrade as supplied. Refer to lot specific COA for the Use by Date. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, ≤ -65 centigrade under sterile conditions after reconstitution.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution in Acetonitrile and TFA.
Reconstitution	Reconstitute at 50-200 μg/mL in sterile 4 mM HCl.
Shipping	The product is shipped with polar packs.

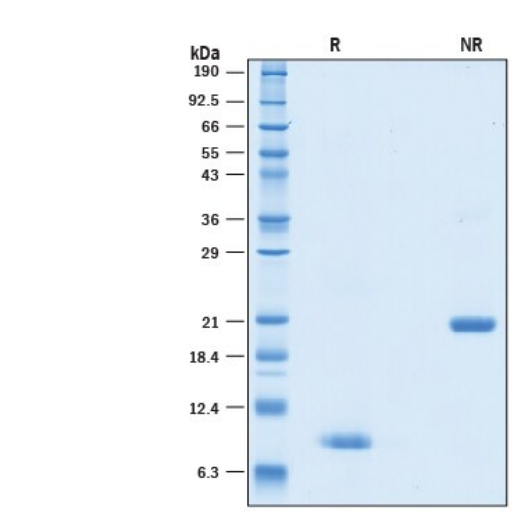
GENE INFORMATION

Gene Name	BMP4 bone morphogenetic protein 4 [Homo sapiens]
Official Symbol	BMP4
Synonyms	BMP4; bone morphogenetic protein 4; BMP2B; BMP-4; BMP-2B; bone morphogenetic protein 2B; ZYME; OFC11; BMP2B1; MCOPS6;

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Gene ID	652
mRNA Refseq	NM_001202
Protein Refseq	NP_001193
MIM	112262
UniProt ID	P12644
Bioactivity	

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SDS-PAGE	

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