

Active Recombinant Human Bone Morphogenetic Protein 8a

Cat. No. BMP8A-591H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human BMP8A protein was expressed in E. coli. Ala264-His402 & Val265-His402.
Species	Human
Source	E.coli
Protein Length	264-402;265-402 a.a.
Description	BMP8A was first isolated from a hippocampal library in a screen to identify relatives of BMP-7(OP-1). BMPs are a family of structurally and functionally related proteins and represent a subfamily of the transforming growth factor β (TGF- β) superfamily. BMPs were originally identified as protein regulators of cartilage and bone formation. They have since been shown to be involved in embryogenesis and morphogenesis of various tissues and organs. BMPs play roles in regulating growth, differentiation, chemotaxis, and apoptosis of various cell types, including mesenchymal, epithelial, hematopoietic, and neuronal cells.
Form	Lyophilized from a 0.2 μ m filtered solution in Acetonitrile and TFA with BSA as a carrier protein.
N-terminal Sequence	Ala264 & Val265
Molecular Weight	15.8 kDa (monomer)

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Activity	Measured by its binding ability in a functional ELISA. Immobilized rhBMP-8a at 1 µg/mL can bind rhBMPR1B/Fc Chimera with a linear range of 0.15-5 µg/mL. Immobilized rhBMPR1A/Fc Chimera at 5 µg/mL can bind rhBMP-8a with a linear range of 3-200 ng/mL.
Endotoxin Level	< 1.0 EU per 1 µg of the protein by the LAL method.
Purity	> 95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Reconstitution	20 µg/mL in sterile 4 mM HCl containing at least 0.1% human or bovine serum albumin.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.

GENE INFORMATION

Gene Name	BMP8A bone morphogenetic protein 8a [Homo sapiens]
Official Symbol	BMP8A
Synonyms	BMP8A; bone morphogenetic protein 8a; bone morphogenetic protein 8A; BMP-8A
Gene ID	353500
mRNA Refseq	NM_181809
Protein Refseq	NP_861525

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UniProt ID	Q7Z5Y6
Chromosome Location	1p35-p32
Pathway	Hedgehog signalingpathway; TGF-beta signaling pathway
Function	cytokine activity;growth factor activity

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