Active Recombinant Mouse Bmp4 Protein

Cat. No. Bmp4-036M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of Mouse bone morphogenetic protein 4 (Bmp4) without tag was expressed in E.coli.
Species	Mouse
Source	E.coli
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. Homozygous knockout mice die in utero, while a conditional knockout mouse exhibits defects in heart development. Transgenic mice overexpressing this gene in a neuron-specific manner exhibit a phenotype resembling the rare hereditary connective tissue disease, fibrodysplasia ossificans progressiva.
Bio-activity	Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED50 for this effect is 5-15 ng/ml.
Molecular Mass	24 kDa
AA Sequence	KKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNSTNHAIV QTLVNSVNSSIPKACCVPTELSAISMLYLDEYDKVVLKNYQEMVVEGCGCRKKNKN CRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNSTNHAIVQTLVNS

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

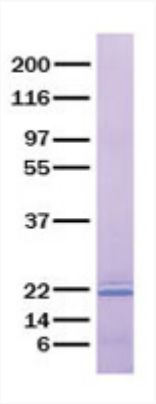
	VNSSIPKACCVPTELSAISMLYLDEYDKVVLKNYQEMVVEGCGCR
Endotoxin	Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)
Purity	>95%, as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
Storage	Store at -80 centigrade.
Storage Buffer	Lyophilized from a 0.2 μM filtered solution of 20mM phosphate buffer,100mM NaCl, pH 7.2
Reconstitution	Resuspend the protein in the desired concentration in proper buffer.

GENE INFORMATION

Gene Name	Bmp4 bone morphogenetic protein 4 [Mus musculus (house mouse)]
Official Symbol	Bmp4
Synonyms	Bmp4; bone morphogenetic protein 4; Bmp-4; Bmp2b; Bmp2b1; Bmp2b-1; bone morphogenetic protein 4; bone morphogenetic protein 2B
Gene ID	12159
mRNA Refseq	NM_007554
Protein Refseq	NP_031580

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UniProt ID	P21275



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