

Product datasheet for **TP720011M**

BMP2 (NM_001200) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human bone morphogenetic protein 2 (BMP2), the domain of Gln283-Arg396
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Gln283-Arg396
Tag:	Tag Free
Predicted MW:	13 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
Bioactivity:	ED50 is less than 50 ng/ml as determined by the cytolysis of MC3T3-E1 cells. Specific Activity of 2.0 x 10 ⁴ IU/mg
Endotoxin:	< 0.1 EU per µg protein as determined by LAL test
Reconstitution Method:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in 50mM Acetic Acid. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage:	Store at -80°C.
Stability:	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_001191
Locus ID:	650
UniProt ID:	P12643 , C8C060
Cytogenetics:	20p12.3
Synonyms:	BDA2; BMP2A; SSFSC; SSFSC1



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Summary:

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, which plays a role in bone and cartilage development. Duplication of a regulatory region downstream of this gene causes a form of brachydactyly characterized by a malformed index finger and second toe in human patients. [provided by RefSeq, Jul 2016]

Protein Families:

Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Secreted Protein, Stem cell relevant signaling - TGFb/BMP signaling pathway, Transmembrane

Protein Pathways:

Acute myeloid leukemia, Basal cell carcinoma, Cytokine-cytokine receptor interaction, Endocytosis, Hedgehog signaling pathway, Hematopoietic cell lineage, Melanogenesis, Pathways in cancer, TGF-beta signaling pathway

Product images: