



20150116ML

Anti-Human BMP-6 (#10H10)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M237
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with human recombinant protein of Bone Morphogenetic Protein 6 (BMP-6).

Target Background

Synonyms (Target):	BMP6; VGR; VGR1
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Human BMP6 is one of at least 15 structurally and functionally related BMPs, which are members of the transforming growth factor β (TGF β) superfamily. BMPs were originally identified as protein regulators of cartilage and bone formation. However, they have since been shown to be involved in embryogenesis and morphogenesis of various tissues and organs. BMPs have also been shown to regulate the growth, differentiation, chemotaxis, and apoptosis of various cell types, including mesenchymal cells, epithelial cells, hematopoietic cells, and neuronal cells. Similarly to other TGF β family proteins, BMPs are highly conserved across animal species. At the amino acid sequence level, mature human and mouse BMP6 shares 96% amino acid sequence identity. BMP6 is synthesized as a large precursor protein that is cleaved at the dibasic cleavage site (RXXR) to release the carboxyterminal domain. Biologically active BMP 6 is a disulfidelinked homodimer of the carboxyterminal 132 amino acid residues that contains the characteristic seven conserved cysteine residues involved in the formation of the cysteine knot and the single interchain disulfide bond. Cellular responses to BMP6 have been shown to be mediated by the formation of heterooligomeric complexes of type I and type II serine/threonine kinase receptors. Based on amino acid sequence similarity, BMP 5, 6, 7, and 8 are in the same subgroup.

Database References Target

Protein RefSeq:	NP_001709
Uniprot ID:	P22004
mRNA RefSeq:	NM_001718

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#10H10)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant human BMP-6
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect human BMP-6 protein.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB, N

Recommended usage:

WB: 1:500-1000

Neutralization: Yes

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!