



Peninsula Laboratories, LLC

A Member of the Bachem Group

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Monoclonal Antibody To Rat BMP-6 Bone Morphogenic Protein 6

Monoclonal antibody morph-6.1 recognizes BMP-6, a member of the TGF- β superfamily of cytokines regulating homeotic gene expression, embryonic development and neurogenesis.

Product Number:	T-3206
Clone:	morph-6.1
Host species, isotype:	Mouse IgG1
Quantity:	100 μ g
Format:	Affinity purified, lyophilized Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.09% sodium azide as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC). Approximate working dilution for IHC: Frozen sections: 1-2 μ g/ml (1:100 - 1:200) Paraffin sections: has been described to work in paraffin sections: microwave pretreatment for antigen retrieval is recommended. Optimal dilutions should be determined by the end user. Suggested positive control: Rat brain.
Immunogen:	Aminoterminal synthetic peptide 1-29.
Antigen, epitope:	Bone morphogenic protein 6. Pre-incubation of morph-6.1 with amino-terminal peptide 1-29 of BMP-6 inhibits binding of the antibody to tissue sections. Pre-incubation with other amino-terminal synthetic peptides of human BMP-7, BMP-4, BMP-3 and BMP-2 as well as an irrelevant peptide does not inhibit specific tissue staining.



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Antigen distribution:

Tissue sections: Positive staining can be observed in embryonic and adult central nervous system. Rat radial glial cells of the developing central nervous system from E11 to E19. In rat peripheral nerves a selective intracellular immunoreactivity can be found in perinuclear region of most Schwann cells which form the myelin sheath. However, some Schwann cells were negative for morph-6.1. BMP-6 can also be found in a variety of other tissues and cell types, notably keratinizing epithelial cells. Smooth muscle cells, characterized by Desmin positivity, were positively stained in normal tissues and in atherosclerotic plaques. Macrophages (CD68+) and endothelial cells were negative with morph-6.1.

Specificity:

Rat: Bone morphogenic Protein-6 (BMP-6)
Synonyms are: vgr-1 (vegetal related) or DVR-6 (decapentaplegic vegetal related).

Other species: phylogenetically highly conserved (human positive)

Selected references

H.J. SCHLUESSENER & R. Meyermann: Expression of BMP-6, a TGF-beta Related Morphogenetic Cytokine, in Rat Radial Glial Cells. *Glia* 12:161-164 (1994)

H.J. SCHLUESSENER & R. Meyermann & S. Jung: Immunolocalization of vgr (BMP-6, DVR-6), a TGF-beta Related Cytokine, to Schwann Cells of the Rat Peripheral Nervous System: Expression Patterns Are Not Modulated by Autoimmune Disease. *Glia* 13:75-78 (1995)

H.J. SCHLUESSENER & R. Meyermann
Immunolocalization of BMP-6, a novel TGF-beta-related cytokine, in normal and atherosclerotic smooth muscle cells, *Atherosclerosis* 113: 153-156 (1995)

For in vitro research only. Caution: this product contains sodium azide, a poisonous and hazardous substance.