

## **Product datasheet for BM4103**

#### OriGene Technologies, Inc.

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## **Bmp6 Mouse Monoclonal Antibody [Clone ID: morph-6.1]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: morph-6.1

Applications: IHC

Recommended Dilution: Immunohistochemistry on Frozen Sections: 10 µg/ml (1/20).

Immunohistochemistry on Paraffin Sections: 10 µg/ml (1/20). Microwave pretreatment for

antigen retrieval is recommended.

**Recommended Positive Control:** Rat Brain.

Reactivity: Human, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Aminoterminal synthetic peptide 1-29.

**Specificity:** This antibody morph-6.1 recognizes Bone morphogenic Protein-6 (BMP-6).

**Antigen Specificity of morph-6.1:** 

Pre-incubation of morph-6.1 with amino-terminal peptide 1-29 of BMP-6 inhibits binding of

the mAb 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.

### **Antigen Distribution on 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.





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**Formulation:** PBS, pH 7.2

State: Purified

State: Lyophilized purified Ig fraction

Stabilizer: 5 mg/ml BSA Preservative: 0.05% Kathon

**Reconstitution Method:** Restore with 0.5 ml distilled water.

**Concentration:** 0.2 mg/ml (after reconstitution)

**Purification:** Affinity Chromatography

Conjugation: Unconjugated

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: bone morphogenetic protein 6

**Database Link:** Entrez Gene 25644 Rat

Q04906

**Background:** Bone Morphogenetic Proteins (BMP) are members of the TGF beta superfamily of cytokines

that affect bone and cartilage formation. Similar to other TGF beta family proteins, BMPs are

highly conserved across animal species. BMPs are involved in embryogenesis and morphogenesis of various tissues and organs. BMP6 is an autocrine stimulator of

chondrocyte differentiation and has been implicated in the development of embryonic kidney

and urinary systems. It is involved in liver growth and differentiation, keratinocyte

differentiation, and regulation of neuronal tissue development. BMP6 expression is localized

to smooth muscle cells of normal cerebral blood vessels, intimal plaques and

atherosclerotically changed blood vessels, further suggesting a role as a regulator of

developing tissues.

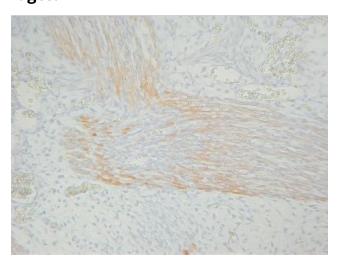
BMP-6 is a member of the TGF-beta superfamily of cytokines regulating homeotic gene

expression, embryonic development and neurogenesis.

Synonyms: BMP-6, VGR, VGR1, Bone morphogenetic protein 6



# **Product images:**



Rat Embryo Paraffin Section stained wit BMP6 antibody (Clone morph-6.1).