

BMPR1B Antibody (N-term K15) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2005a

### Specification

## **BMPR1B** Antibody (N-term K15) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O00238</u> <u>NP\_001194</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 56930 1-30

## **BMPR1B** Antibody (N-term K15) - Additional Information

Gene ID 658

**Other Names** Bone morphogenetic protein receptor type-1B, BMP type-1B receptor, BMPR-1B, CDw293, BMPR1B

#### Target/Specificity

This BMPR1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human BMPR1B.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

BMPR1B Antibody (N-term K15) is for research use only and not for use in diagnostic or therapeutic procedures.

### **BMPR1B** Antibody (N-term K15) - Protein Information

Name BMPR1B

**Function** On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I



receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for BMP7/OP-1 and GDF5. Positively regulates chondrocyte differentiation through GDF5 interaction.

**Cellular Location** 

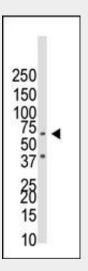
Cell membrane; Single-pass type I membrane protein

# **BMPR1B** Antibody (N-term K15) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## BMPR1B Antibody (N-term K15) - Images



Western blot analysis of anti-BMPR1B Pab (Cat. #ap2005a) in NCI-H460 cell lysate. BMPR1B (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

### BMPR1B Antibody (N-term K15) - Background

The bone morphogenetic protein (BMP) receptors are a family of transmembrane serine/threonine kinases that include the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. These receptors are also closely related to the activin receptors, ACVR1 and ACVR2. The ligands of these receptors are members of the TGF-beta superfamily. TGF-betas and activins transduce their signals through the formation of heteromeric complexes with 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding.



# **BMPR1B Antibody (N-term K15) - References**

Lehmann, K., et al., Proc. Natl. Acad. Sci. U.S.A. 100(21):12277-12282 (2003). Astrom, A.K., et al., Mamm. Genome 10(3):299-302 (1999). Ide, H., et al., Oncogene 14(11):1377-1382 (1997). ten Dijke, P., et al., Science 264(5155):101-104 (1994). Ide, H., et al., Cytogenet. Cell Genet. 81 (3-4), 285-286 (1998).