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BMPR1B Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2005B

Specification

BMPR1B Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O00238
Other Accession	P36898, Q05438, NP_001194
Reactivity	**Human**
Predicted	**Chicken, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Antigen Region	**472-502**

BMPR1B Antibody (C-term) - Additional Information

Gene ID 658

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

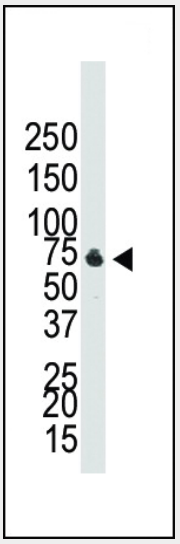
Target/Specificity
This BMPR1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 472-502 amino acids from the C-terminal region of human BMPR1B.

Dilution
WB~~1:1000
IHC-P~~1:50~100

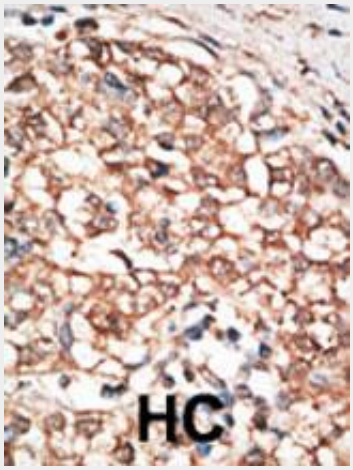
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.



Western blot analysis of anti-BMPR1B Pab (Cat. #ap2005b) in NCI-H460 cell lysate. BMPR1B (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

BMPR1B Antibody (C-term) - Background

BMPR1B Antibody (C-term) - 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 {ECO:0000250|UniProtKB:P36898}. Membrane; Single-pass type I membrane protein

BMPR1B Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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 (C-term) - References

Kan, L. et al. Stem Cells.January; 27(1): 150?56(2009).
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).

BMPR1B Antibody (C-term) - Citations

- BMP signaling induces astrocytic differentiation of clinically derived oligodendroglioma propagating cells.
- Growth differentiation factor 9 is a germ cell regulator of Sertoli cell function.
- Dysregulation of local stem/progenitor cells as a common cellular mechanism for heterotopic ossification.