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BMPR2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2006b

Specification

BMPR2 Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q13873
Other Accession	O35607
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**27-56**

BMPR2 Antibody (N-term) - Additional Information

Gene ID 659

Other Names
Bone morphogenetic protein receptor type-2, BMP type-2 receptor, BMPR-2, Bone morphogenetic protein receptor type II, BMP type II receptor, BMPR-II, BMPR2, PPH1

Target/Specificity
This BMPR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 27~56 amino acids from the N-terminal region of human BMPR2.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50
E~~Use at an assay dependent concentration.

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
BMPR2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BMPR2 Antibody (N-term) - Protein Information

Name BMPR2

Synonyms PPH1

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. Can also mediate signaling through the activation of the p38MAPK cascade (PubMed:12045205). Binds to BMP7, BMP2 and, less efficiently, BMP4. Binding is weak but enhanced by the presence of type I receptors for BMPs. Mediates induction of adipogenesis by GDF6. Promotes signaling also by binding to activin A/INHBA (PubMed:24018044).

Cellular Location
Cell membrane; Single-pass type I membrane protein

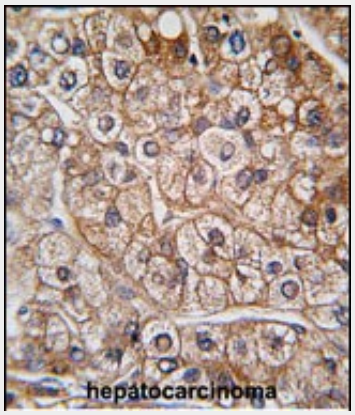
Tissue Location
Highly expressed in heart and liver.

BMPR2 Antibody (N-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

BMPR2 Antibody (N-term) - Images



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with BMPR2 antibody (N-term), 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.

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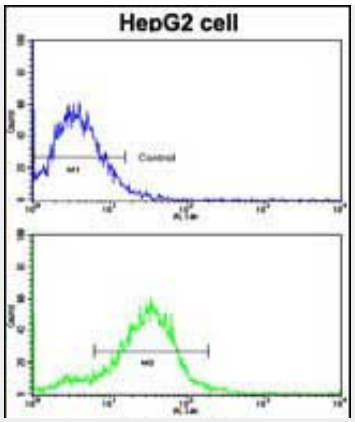

Flow cytometric analysis of HepG2 cells using BMPR2 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

BMPR2 Antibody (N-term) - Background

BMPR2 is a member of the bone morphogenetic protein (BMP) receptor family of transmembrane serine/threonine kinases. The ligands of this receptor are BMPs, which are members of the TGF-beta superfamily. BMPs are involved in endochondral bone formation and embryogenesis. These proteins transduce their signals through the formation of heteromeric complexes of 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. Mutations in BMPR2 have been associated with primary pulmonary hypertension.

BMPR2 Antibody (N-term) - References

Pouliot, F., et al., Cancer Res. 63(2):277-281 (2003).
Nishihara, A., et al., Mol. Biol. Cell 13(9):3055-3063 (2002).
Humbert, M., et al., Eur Respir J 20(3):518-523 (2002).
Vitt, U.A., et al., Biol. Reprod. 67(2):473-480 (2002).
Nohe, A., et al., J. Biol. Chem. 277(7):5330-5338 (2002).