

**BMPR2 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2006b****Specification**

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**BMPR2 Antibody (N-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q13873</a>
Other Accession	<a href="#">Q35607</a>
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

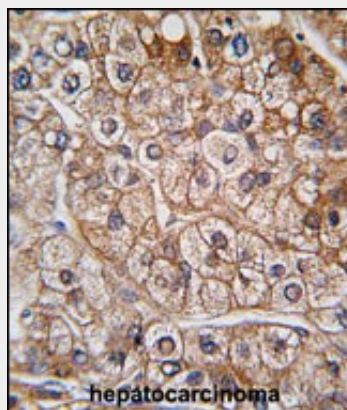
**Tissue Location**

Highly expressed in heart and liver.

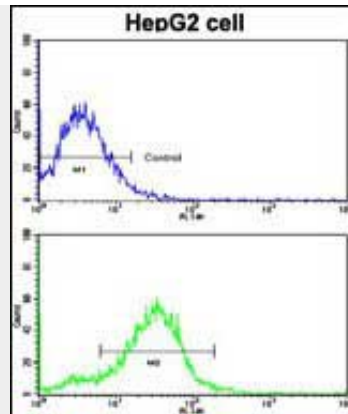
**BMPR2 Antibody (N-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.



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).