

# BMPR2 Antibody (NT)

**ALTERNATE NAMES:** BMPR2; PPH1; Bone morphogenetic protein receptor type-2; Bone morphogenetic protein receptor type II

**CATALOG #:** 6780-100

**AMOUNT:** 100 µl

**HOST/ISOTYPE:** Rabbit

**IMMUNOGEN:** This BMPR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 28-59 amino acids from the N-terminal region of human BMPR2.

**MOLECULAR WEIGHT:** ~115.201 kDa

**FORM:** Liquid

**FORMULATION:** In PBS with 0.09% (W/V) sodium azide.

**PURIFICATION:** This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**SPECIES REACTIVITY:** Human, Mouse.

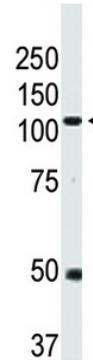
**STORAGE CONDITIONS:** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

**DESCRIPTION:** BMPR2 is a type II serine/threonine receptor kinase that binds to an array of secreted bone morphogenetic proteins (BMPs). BMPs belong to the superfamily of TGF-β ligands that modulate gastrulation, neurogenesis, chondrogenesis, interdigital cell death, and bone morphogenesis. In contrast to the TGF-β type II receptor, BMPR2 contains an extended carboxyl-terminal region that interacts with multiple signaling molecules to modulate the responsiveness of target genes to BMPs. BMP signaling requires oligomerization of both type I and type II receptors to elicit a functional response of target genes. BMP binding to type I and II receptors induces Smad1/5/8 phosphorylation which is required for the activation of target genes. In vitro and in vivo evidence suggests that defects in BMPR2 may contribute to pulmonary hypertension, inflammation, and endothelial injury.

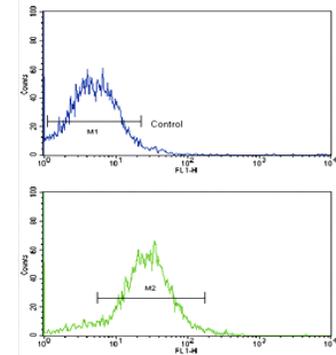
**APPLICATION:** WB: 1:1000, IHC: 1:10 – 1:50, FC: 1:10 – 1:50.

**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user.

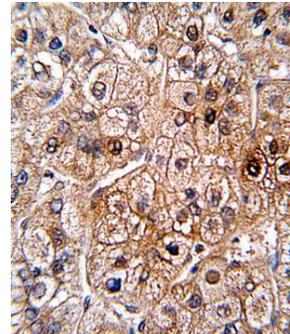
**FOR RESEARCH USE ONLY! Not to be used on humans.**



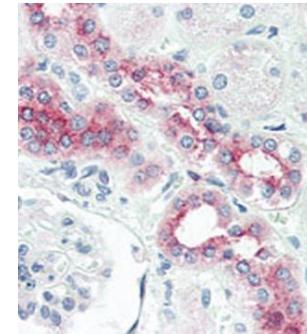
Western blot analysis in mouse heart tissue lysate. BMPR2 (arrow) was detected using purified Pab.



FACS analysis of HepG2 cells using BMPR2 Antibody (bottom histogram) compared to a negative control cell (top histogram).



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with BMPR2 antibody which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.



Formalin-fixed and paraffin-embedded human Kidney tissue reacted with BMPR2 antibody which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.

**RELATED PRODUCTS:**

- BMP-10, human recombinant (Cat # 4581-20, -100, -1000)
- BMP-11, human recombinant (Cat # 4576-10, -50, -1000)
- BMP-12, human recombinant (Cat # 4572-20, -100, -1000)
- BMP-13, human recombinant (Cat # 4639-10, -50, -1000)
- BMP-14, human recombinant (Cat # 4580-10, -50, -1000)
- BMP-2, human recombinant (Cat # 4577-10, -50, -1000)
- BMP-3, human recombinant (Cat # 4573-10, -50, -1000)
- BMP-4, human recombinant (Cat # 4578-10, -50, -1000)
- BMP-5, human recombinant (Cat # 4574-10, -50, -1000)
- BMP-6, human recombinant (Cat # 4911-10, -50, -1000)
- BMP-7, human recombinant (Cat # 4579-10, -50, -1000)
- BMPR1A, human recombinant (Cat # 4881-10, -1000)

