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BMPR2 Antibody (NT)

Rabbit Polyclonal Antibody

Catalog # ABV11322

Specification

BMPR2 Antibody (NT) - Product Information

Application	**WB, IHC, FC**
Primary Accession	Q13873
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**115201**

BMPR2 Antibody (NT) - Additional Information

Gene ID 659

Positive Control	**Western blot: mouse heart tissue lysate, IHC: human hepatocarcinoma and kidney tissues, FACS: HepG2 cells.**
Application & Usage	**WB: 1:1000, IHC: 1:10 – 1:50, FC: 1:10 – 1:50.**

Other Names
BMPR2; PPH1; Bone morphogenetic protein receptor type-2; Bone morphogenetic protein receptor type II

Target/Specificity
BMPR2

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
In PBS with 0.09% (W/V) sodium azide.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage

BMPR2 Antibody (NT) - Background

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.

-20 °C

Background Descriptions

Precautions
BMPR2 Antibody (NT) is for research use only and not for use in diagnostic or therapeutic procedures.

BMPR2 Antibody (NT) - 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. 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.

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

Tissue Location
Highly expressed in heart and liver.

BMPR2 Antibody (NT) - 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