

**Anti-BMPR1B Picoband Antibody**  
Catalog # ABO12215

**Specification**

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**Anti-BMPR1B Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O00238</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Bone morphogenetic protein receptor type-1B(BMPR1B) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-BMPR1B Picoband Antibody - Additional Information**

**Gene ID** 658

**Other Names**

Bone morphogenetic protein receptor type-1B, BMP type-1B receptor, BMPR-1B, 2.7.11.30, CDw293, BMPR1B

**Calculated MW**

56930 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Membrane; Single-pass type I membrane protein.

**Protein Name**

Bone morphogenetic protein receptor type-1B

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

E.coli-derived human BMPR1B recombinant protein (Position: K14-Q184). Human BMPR1B shares 97.1% amino acid (aa) sequence identity with mouse BMPR1B.

**Purification**

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins

### Storage

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

### Sequence Similarities

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.

## Anti-BMPR1B Picoband Antibody - 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

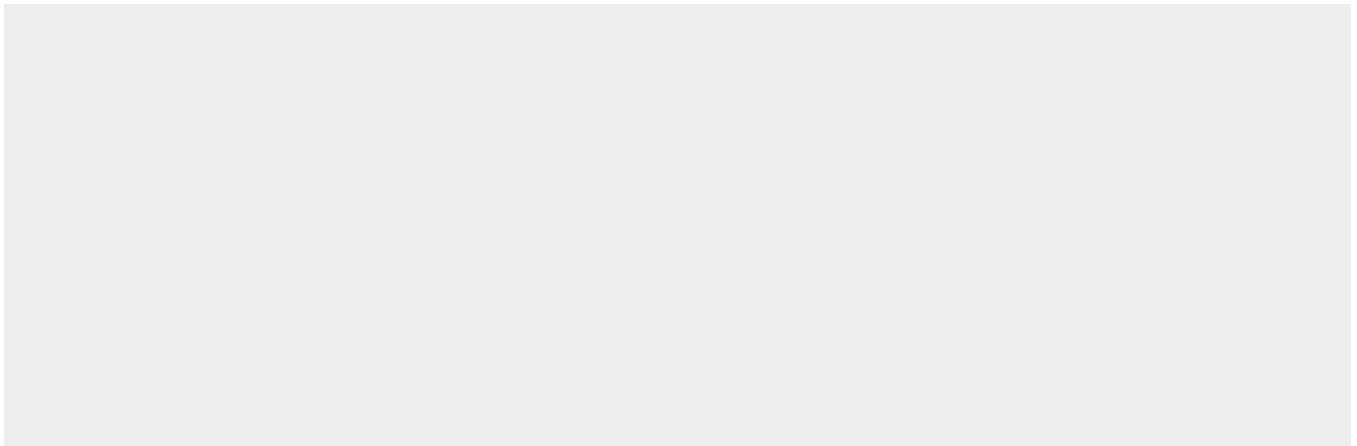
Cell membrane; Single-pass type I membrane protein

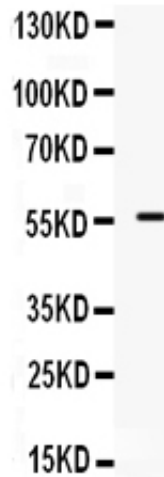
## Anti-BMPR1B Picoband Antibody - Protocols

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

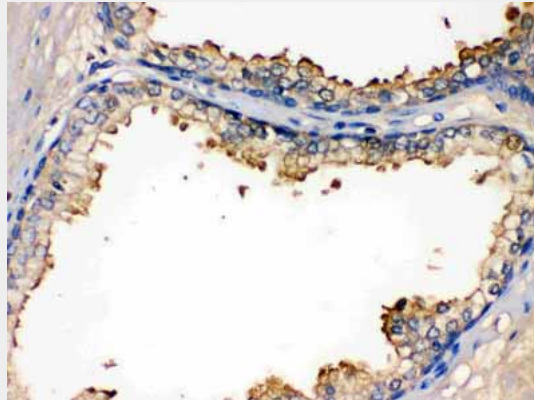
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-BMPR1B Picoband Antibody - Images





Anti- BMPR1B Picoband antibody, ABO12215,Western blottingAll lanes: Anti BMPR1B (ABO12215) at 0.5ug/mlWB: Human Placenta Tissue Lysate at 50ugPredicted bind size: 57KDObserved bind size: 57KD



Anti- BMPR1B Picoband antibody, ABO12215,IHC(P)IHC(P): Human Prostatic Cancer Tissue

### Anti-BMPR1B Picoband Antibody - Background

BMPR1B (Bone Morphogenetic Protein Receptor Type IB), also known as ALK6, is a protein which in humans is encoded by the BMPR1B gene. BMPR1B 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. By analysis of a monochromosome hybrid mapping panel and by FISH, Astrom et al. (1999) mapped the BMPR1B gene to chromosome 4q22-q24. Ide et al. (1997) compared BMP receptor expression in normal and cancerous prostate tissues. While BMPR1A and BMPR2 were expressed at similar levels in all prostate tissues, BMPR1B was expressed at a significantly reduced level in cancerous prostate tissue.