10320 Camino Santa Fe, Suite G
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Anti-BMPR1B Antibody
Catalog # ABO11323

Specification

Anti-BMPR1B Antibody - Product Information

Application	**WB**
Primary Accession	O00238
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Bone morphogenetic protein receptor type-1B(BMPR1B) detection. Tested with WB in Human;Mouse;Rat.

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

Anti-BMPR1B 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
Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

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 Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human BMPR1B(145-160aa FCYFRYKRQETRPRYS), different from the related rat and mouse sequences by one amino acid.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, 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 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 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 Cytomety
- Cell Culture

Anti-BMPR1B Antibody - Images

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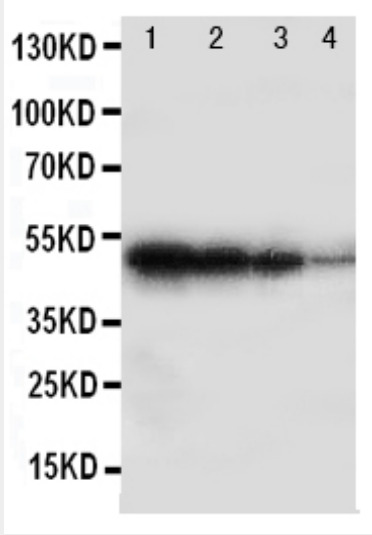

Anti-BMPR1B antibody, ABO11323, Western blottingRecombinant Protein Detection Source: E.coli derived -recombinant Human BMPR1B, 49.0KD(162aa tag+D17-D289)Lane 1: Recombinant Human BMPR1B Protein 10ngLane 2: Recombinant Human BMPR1B Protein 5ngLane 3: Recombinant Human BMPR1B Protein 2.5ngLane 4: Recombinant Human BMPR1B Protein 1.25ng

Anti-BMPR1B 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.