

Anti-BMPR1B Antibody

Catalog # ABO11323

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.

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
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Membrane; Single-pass type I membrane protein.
Source	Eukaryota
Protein Name	Bone morphogenetic protein receptor type-1B
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human BMPR1B(145-160aa FCYFRYKRQETRPYS), 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 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.

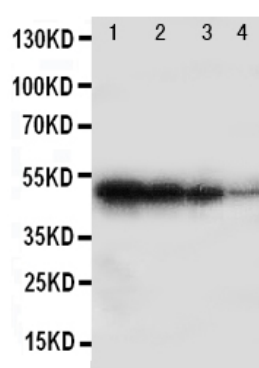
Protein Information

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

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.

Images



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

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