

Basic Information

Product Name	Anti-BMPR1B Antibody
Gene Name	BMPR1B
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human BMPR1B, different from the related rat and mouse sequences by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	57 kDa
Dilution Ratios	Western blot (WB):1:500-2000

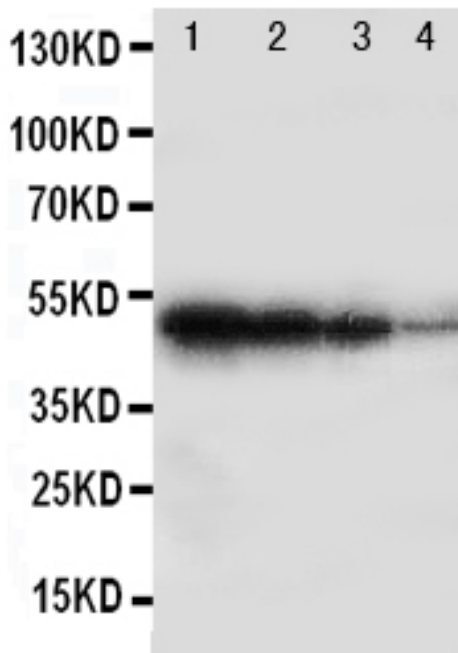
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

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.

Selected Validation Data



Western blot analysis of BMPR1B using anti-BMPR1B antibody (BA3305).

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.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-BMPR1B antigen affinity purified polyclonal antibody (BA3305) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for BMPR1B at approximately 49 kDa.