

## Rabbit Anti-BMPR1B antibody

SL6639R

Product Name:	BMPR1B
Chinese Name:	骨形态发生蛋白受体1B抗体
Alias:	BMPR-IB; Activin receptor like kinase 6; Acvrlk6; ALK 6; ALK6; alk6tr; BMP type- 1B receptor; BMPR IB; BMPR-1B; Bmpr1b; BMPRIB; BMR1B_HUMAN; Bone morphogenetic protein receptor type 1B; Bone morphogenetic protein receptor type IB; Bone morphogenetic protein receptor type-1B; BR 1b; BR1b; CDw 293; CDw293; CDw293 antigen; CFK 43a; CFK43a; Serine/threonine receptor kinase; zALK 6; zALK6.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Rabbit, Sheep,.
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BMPR1B:61- 160/502 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

Involvement in disease; Defects in BMPR1B are the cause of acromesomelic chondrodysplasia with genital anomalies (AMDGA). Acromesomelic chondrodysplasias are rare hereditary skeletal disorders characterized by short stature, very short limbs, and hand/foot malformations. The severity of limb abnormalities increases from proximal to distal with profoundly affected hands and feet showing brachydactyly and/or rudimentary fingers (knob-like fingers).

Defects in BMPR1B are a cause of brachydactyly type A2 (BDA2) [MIM:112600]. Brachydactylies (BDs) are a group of inherited malformations characterized by shortening of the digits due to abnormal development of the phalanges and/or the metacarpals. They have been classified on an anatomic and genetic basis into five groups, A to E, including three subgroups (A1 to A3) that usually manifest as autosomal dominant traits. BDA2 was described first in a large Norwegian kindred. BDA2 is caused by mutations in BMPR1B gene and studies demonstrate that these mutations function as dominant negatives in vitro and in vivo.

## **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.

Subcellular Location:

Membrane; Single-pass type I membrane protein.

## **DISEASE:**

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## Similarity:

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

Contains 1 GS domain.

Contains 1 protein kinase domain
SWISS:
000238
Gene ID: 658
Database links:
Entrez Gene: 658Human
Entrez Gene: 12167Mouse
Omim: 603248Human
SwissProt: 000238Human
SwissProt: P36898Mouse
Unigene: 598475Human
Unigene: 39089Mouse
Important Note:
This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.
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