10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BMPR1B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12034c

Product Information

Application	WB, IHC-P, E
Primary Accession	O00238
Other Accession	NP_001194.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31760
Calculated MW	56930
Antigen Region	134-162

Additional Information

Gene ID	658
Other Names	Bone morphogenetic protein receptor type-1B, BMP type-1B receptor, BMPR-1B, CDw293, BMPR1B
Target/Specificity	This BMPR1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 134-162 amino acids from the Central region of human BMPR1B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BMPR1B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

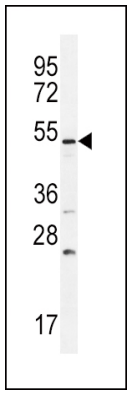
Background

This gene encodes 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. Mutations in this gene have been associated with primary pulmonary hypertension.

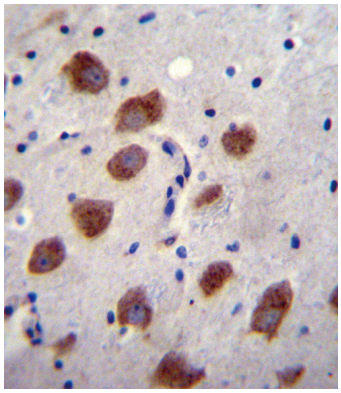
References

Mick, E., et al. J Am Acad Child Adolesc Psychiatry 49(9):898-905(2010)
Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
Ma, Y., et al. J. Exp. Clin. Cancer Res. 29, 85 (2010) :
Saetrom, P., et al. Cancer Res. 69(18):7459-7465(2009)

Images



BMPR1B Antibody (Center) (Cat. #AP12034c) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the BMPR1B antibody detected the BMPR1B protein (arrow).



BMPR1B Antibody (Center) (Cat. #AP12034c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of BMPR1B Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.