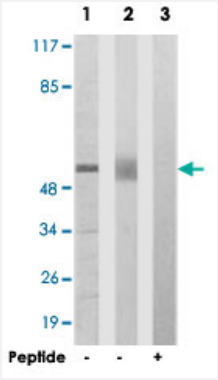
ACVR1B polyclonal antibody

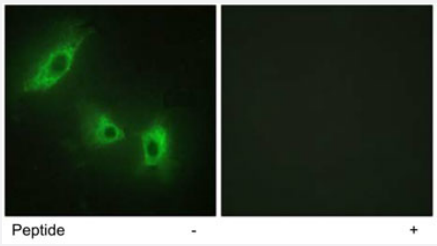
Catalog # PAB18053 Size 100 ug

Applications



Western Blot

Western blot analysis of extracts from 293 cells (Lane 1) and mouse liver cells (Lane 2 and lane 3), using ACVR1B polyclonal antibody (Cat # PAB18053).
Peptide "+" means "with peptide blocking".



Immunofluorescence

Immunofluorescence analysis of HeLa cells, using ACVR1B polyclonal antibody (Cat # PAB18053).
Peptide "+" means "with peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACVR1B.
Immunogen	A synthetic peptide corresponding to amino acids 73-122 of human ACVR1B.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to ACVR1B.
Form	Liquid

Purification	Affinity purification
Recommend Usage	Western Blot (1:500~1:1000) Immunofluorescence (1:500~1:1000) ELISA (1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot

  Western blot analysis of extracts from 293 cells (Lane 1) and mouse liver cells (Lane 2 and lane 3), using ACVR1B polyclonal antibody (Cat # PAB18053).
  Peptide "+" means "with peptide blocking".

- Immunofluorescence

  Immunofluorescence analysis of HeLa cells, using ACVR1B polyclonal antibody (Cat # PAB18053).
  Peptide "+" means "with peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — ACVR1B

Entrez GeneID	91
Protein Accession#	P36896
Gene Name	ACVR1B
Gene Alias	ACTRIB, ACVRLK4, ALK4, SKR2
Gene Description	activin A receptor, type IB
Omim ID	601300
Gene Ontology	Hyperlink

Gene Summary	Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with a cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling, and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. This gene encodes activin A type IB receptor, composed of 11 exons. Alternative splicing and alternative polyadenylation result in 3 fully described transcript variants. The mRNA expression of variants 1, 2, and 3 is confirmed, and a potential fourth variant contains an alternative exon 8 and lacks exons 9 through 11, but its mRNA expression has not been confirmed. [provided by RefSeq
Other Designations	activin A receptor, type II-like kinase 4|activin A type IB receptor|activin receptor-like kinase 4|serine(threonine) protein kinase receptor R2

Publication Reference

- Genomic structure and cloned cDNAs predict that four variants in the kinase domain of serine/threonine kinase receptors arise by alternative splicing and poly(A) addition.

  Xu J, Matsuzaki K, McKeehan K, Wang F, Kan M, McKeehan WL.

  PNAS 1994 Aug; 91(17):7957.

- Type I receptors specify growth-inhibitory and transcriptional responses to transforming growth factor beta and activin.

  Carcamo J, Weis FM, Ventura F, Wieser R, Wrana JL, Attisano L, Massague J.

  Molecular and Cellular Biology 1994 Jun; 14(6):3810.

- Activin receptor-like kinases: a novel subclass of cell-surface receptors with predicted serine/threonine kinase activity.

  ten Dijke P, Ichijo H, Franzen P, Schulz P, Saras J, Toyoshima H, Heldin CH, Miyazono K.

  Oncogene 1993 Aug; 8(10).

Pathway

- Adherens junction
- Chronic myeloid leukemia
- Colorectal cancer

- Cytokine-cytokine receptor interaction
- Endocytosis
- MAPK signaling pathway
- Pancreatic cancer
- Pathways in cancer
- TGF-beta signaling pathway

Disease

- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Neoplasm Recurrence
- Neoplasms
- Obesity
- Ovarian Failure
- Polycystic Ovary Syndrome
- Puberty
- Schizophrenia
- Thrombophilia
- Tobacco Use Disorder