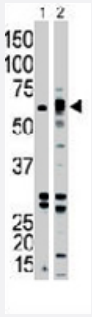
ACVR1B polyclonal antibody

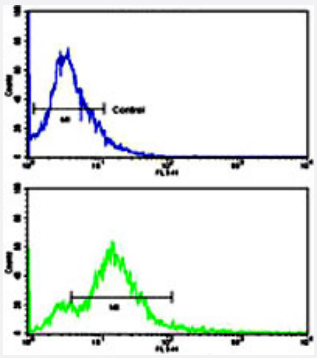
Catalog # PAB3467 Size 400 uL

Applications



Western Blot

The ACVR1B polyclonal antibody (Cat # PAB3467) is used in Western blot to detect ACVR1B in Jurkat (1) and mouse kidney (2) tissue lysates.



Flow Cytometry

Flow cytometric analysis of 293 cells using ACVR1B polyclonal antibody (Cat # PAB3467)(bottom histogram) compared to a negative control cell (top histogram).
FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACVR1B.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to internal region of human ACVR1B.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification

Recommend Usage	Flow Cytometry (1:10-50) Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage 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

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  Flow cytometric analysis of 293 cells using ACVR1B polyclonal antibody (Cat # PAB3467)(bottom histogram) compared to a negative control cell (top histogram).
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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

- Activin signaling through type IB activin receptor stimulates aromatase activity in the ovarian granulosa cell-like human granulosa (KGN) cells.

  Mukasa C, Nomura M, Tanaka T, Tanaka K, Nishi Y, Okabe T, Goto K, Yanase T, Nawata H.

  Endocrinology 2003 Apr; 144(4):1603.

- Identification of a functional binding site for activin on the type I receptor ALK4.

  Harrison CA, Gray PC, Koerber SC, Fischer W, Vale W.

  The Journal of Biological Chemistry 2003 Jun; 278(23):21129.

- Overexpression of wild-type activin receptor alk4-1 restores activin antiproliferative effects in human pituitary tumor cells.

  Danila DC, Zhang X, Zhou Y, Haidar JN, Klibanski A.

  The Journal of Clinical Endocrinology and Metabolism 2002 Oct; 87(10):4741.

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