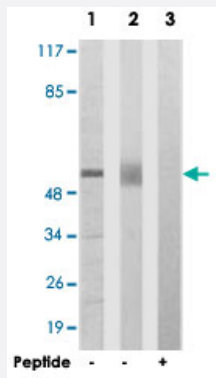


ACVR1B polyclonal antibody

Catalog # PAB18053 Size 100 ug

Applications

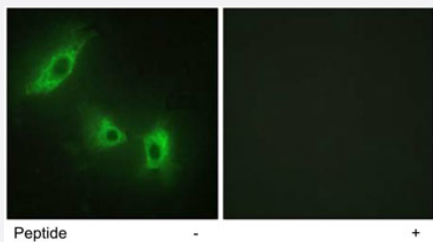


Western Blot

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 should 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, McKeen K, Wang F, Kan M, McKeen 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](#)