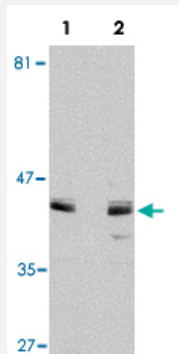


ACVR1 polyclonal antibody

Catalog # PAB16547 Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of ACVR1 in A-549 cell lysate with ACVR1 polyclonal antibody (Cat # PAB16547) at 1 ug/mL in (Lane 1) the absence and (Lane 2) the presence of blocking peptide.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACVR1.
Immunogen	A synthetic peptide corresponding to N-terminus 14 amino acids of human ACVR1.
Host	Rabbit
Reactivity	Human, Mouse
Specificity	Specific of ACVR1 antibody.
Form	Liquid
Recommend Usage	Western Blot (1-2 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.02% sodium azide)
Storage Instruction	Store at 4°C for three months. 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 should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of ACVR1 in A-549 cell lysate with ACVR1 polyclonal antibody (Cat # PAB16547) at 1 ug/mL in (Lane 1) the absence and (Lane 2) the presence of blocking peptide.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — ACVR1

Entrez GeneID [90](#)

Protein Accession# [NP_001096](#)

Gene Name ACVR1

Gene Alias ACTRI, ACVR1A, ACVRLK2, ALK2, FOP, SKR1, TSRI

Gene Description activin A receptor, type I

Omim ID [102576 135100](#)

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 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 I receptor which signals a particular transcriptional response in concert with activin type II receptors. Mutations in this gene are associated with fibrodysplasia ossificans progressiva. [provided by RefSeq]

Other Designations

TGF-B superfamily receptor type II|activin A receptor, type II-like kinase 2|activin A type I receptor|hydroxyalkyl-protein kinase|serine/threonine-protein kinase receptor R1

Publication Reference

- [Activin receptor-like kinase-2 inhibits activin signaling by blocking the binding of activin to its type II receptor.](#)

Renlund N, O'Neill FH, Zhang L, Sidis Y, Teixeira J.

The Journal of Endocrinology 2007 Oct; 195(1):95.

- [Mullerian inhibiting substance signaling uses a bone morphogenetic protein \(BMP\)-like pathway mediated by ALK2 and induces SMAD6 expression.](#)

Clarke TR, Hoshiya Y, Yi SE, Liu X, Lyons KM, Donahoe PK.

Molecular Endocrinology 2001 Jun; 15(6):946.

Pathway

- [Cytokine-cytokine receptor interaction](#)
- [TGF-beta signaling pathway](#)

Disease

- [Abortion](#)
- [Breast Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Infertility](#)
- [Intracranial Aneurysm](#)
- [Narcolepsy](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Prostate cancer](#)

- [Prostatic Neoplasms](#)
- [Puberty](#)
- [Stroke](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)