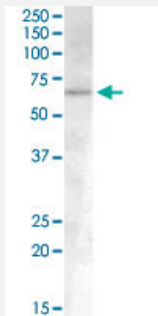


ACVR1 polyclonal antibody

Catalog # PAB7414

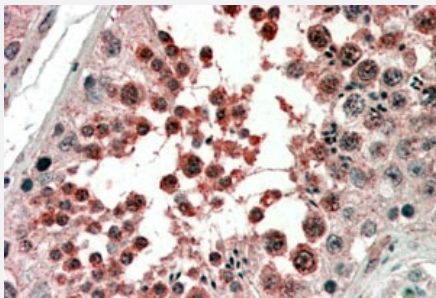
Size 100 ug

Applications



Western Blot (Tissue lysate)

ACVR1 polyclonal antibody (Cat # PAB7414) (0.3 ug/mL) staining of human umbilical cord lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

ACVR1 polyclonal antibody (4 ug/mL) staining of paraffin embedded human testis. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of ACVR1.
Immunogen	A synthetic peptide corresponding to human ACVR1.
Sequence	C-RKFKRRNQERLNPRD
Host	Goat
Theoretical MW (kDa)	57.2
Reactivity	Human
Form	Liquid

Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:128000) Western blot (0.3-1 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (4-6 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 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 (Tissue lysate)

ACVR1 polyclonal antibody (Cat # PAB7414) (0.3 ug/mL) staining of human umbilical cord lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — ACVR1

Entrez GeneID	90
Protein Accession#	NP_001096.1
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

- [A recurrent mutation in the BMP type I receptor ACVR1 causes inherited and sporadic fibrodysplasia ossificans progressiva.](#)

Shore EM, Xu M, Feldman GJ, Fenstermacher DA, Cho TJ, Choi IH, Connor JM, Delai P, Glaser DL, LeMerrer M, Morhart R, Rogers JG, Smith R, Triffitt JT, Urtizberea JA, Zasloff M, Brown MA, Kaplan FS.

Nature Genetics 2006 Mar; 38(5):525.

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](#)