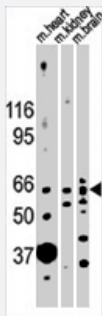


ACVR2B polyclonal antibody

Catalog # PAB2022

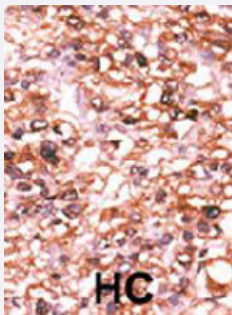
Size 400 uL

Applications



Western Blot (Tissue lysate)

Western blot analysis of ACVR2B polyclonal antibody (Cat # PAB2022) in mouse heart, kidney and brain lysates (35 ug/lane). ACVR2B (arrow) was detected using the purified Polyclonal antibody.



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

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with ACVR2B polyclonal antibody (Cat # PAB2022), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. HC = hepatocarcinoma.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACVR2B.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human ACVR2B.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) 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 should be handled by trained staff only.

Applications

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Gene Info — ACVR2B

Entrez GeneID	93
Protein Accession#	NP_001097:Q13705
Gene Name	ACVR2B
Gene Alias	ACTRIIB, ActR-IIB, MGC116908
Gene Description	activin A receptor, type IIB
Omim ID	602730
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. Type II receptors are considered to be constitutively active kinases. This gene encodes activin A type IIB receptor, which displays a 3- to 4-fold higher affinity for the ligand than activin A type II receptor. [provided by RefSeq]

Other Designations

activin A type IIB receptor

Publication Reference

- [Modulation of noncanonical TGF-β signaling prevents cleft palate in Tgfr2 mutant mice.](#)

Iwata J, Hacia JG, Suzuki A, Sanchez-Lara PA, Urata M, Chai Y.

The Journal of Clinical Investigation 2012 Mar; 122(3):873.

Application: WB-Tr, Mouse, Mouse embryonic palatal mesenchymal cells

- [An activin mutant with disrupted ALK4 binding blocks signaling via type II receptors.](#)

Harrison CA, Gray PC, Fischer WH, Donaldson C, Choe S, Vale W.

The Journal of Biological Chemistry 2004 Jul; 279(27):28036.

- [Expression of activin subunits and receptors in the developing human ovary: activin A promotes germ cell survival and proliferation before primordial follicle formation.](#)

Martins da Silva SJ, Bayne RA, Cambray N, Hartley PS, McNeilly AS, Anderson RA.

Developmental Biology 2004 Feb; 266(2):334.

- [Inhibin, activin, follistatin, activin receptors and beta-glycan gene expression in the placental tissue of patients with pre-eclampsia.](#)

D Casagrandi, C Bearfield, J Geary, C W Redman, S Muttukrishna.

Molecular Human Reproduction 2003 Apr; 9(4):199.

Pathway

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

Disease

- [Genetic Predisposition to Disease](#)
- [Hyperparathyroidism](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)