



ACTR-IB Polyclonal Antibody

Catalog No	YP-Ab-13133
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	ACVR1B
Protein Name	Activin receptor type-1B
Immunogen	The antiserum was produced against synthesized peptide derived from human ACV1B. AA range:73-122
Specificity	ACTR-IB Polyclonal Antibody detects endogenous levels of ACTR-IB protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ACVR1B; ACVRLK4; ALK4; Activin receptor type-1B; Activin receptor type IB; ACTR-IB; Activin receptor-like kinase 4; ALK-4; Serine/threonine-protein kinase receptor R2; SKR2
Observed Band	56kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein .
Tissue Specificity	Expressed in many tissues, most strongly in kidney, pancreas, brain, lung, and liver.
Function	catalytic activity:ATP + [receptor-protein] = ADP + [receptor-protein] phosphate.,cofactor:Magnesium or manganese.,function:On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Phosphorylates TTRAP.,PTM:Autophosphorylated.,similarity:Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.,similarity:Contains 1 GS domain.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with AIP1. Part of a complex consisting of AIP1, ACVR2A, ACVR1B and SMAD3. Interacts with TTRAP.,tissue specificity:Expressed in many tissues, most strongly in kidney, pancreas, brain,



lung, and liver.,

Background

This gene encodes an activin A type IB receptor. 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 and two type II receptors. This protein is a type I receptor which is essential for signaling. Mutations in this gene are associated with pituitary tumors. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Jun 2010],

matters needing attention

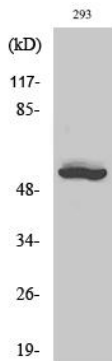
Avoid repeated freezing and thawing!

Usage suggestions

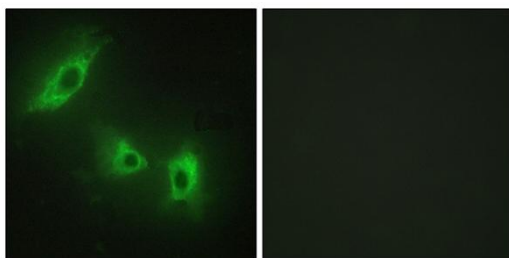
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



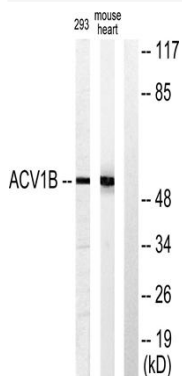
Products Images



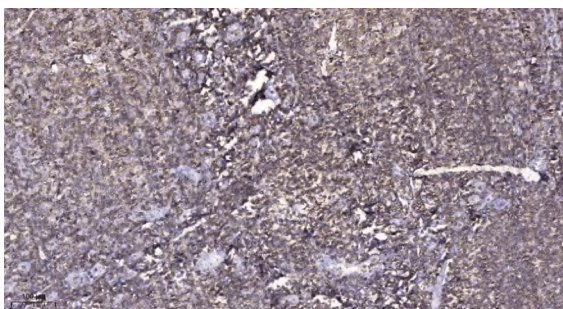
Western Blot analysis of various cells using ACTR-IB Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of HeLa cells, using ACV1B Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 and mouse liver cells, using ACV1B Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).