

**Product Name: ACTR-IB Rabbit Polyclonal Antibody****Catalog #: APRab06562**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
<b>Molecular Weight</b>	56kDa

**Antigen Information**

<b>Gene Name</b>	ACVR1B
<b>Alternative Names</b>	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
<b>Gene ID</b>	91.0
<b>SwissProt ID</b>	P36896
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ACV1B. AA range:73-122

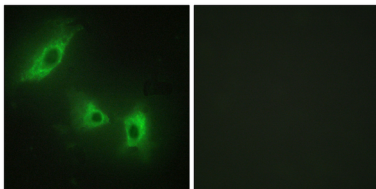
**Background**

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],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.,

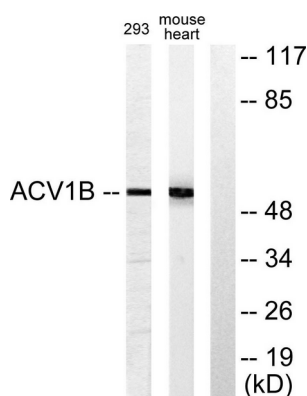
## Research Area

MAPK\_ERK\_Growth;MAPK\_G\_Protein;Cytokine-cytokine receptor interaction;Endocytosis;TGF-beta;Adherens\_Junction;Pathways in cancer;Colorectal cancer;Pancreatic cancer;Chronic myeloid leukemia;

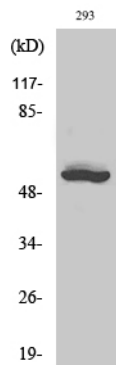
## Image Data



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.



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