

For Research Use Only

# ACVR1 Monoclonal antibody

Catalog Number: 67417-1-Ig **1 Publications**



## Basic Information

<b>Catalog Number:</b> 67417-1-Ig	<b>GenBank Accession Number:</b> BC033867	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 1600 ug/ml by 90 Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> UNIPROT ID: Q04771	<b>CloneNo.:</b> 1F11B10
<b>Source:</b> Mouse	<b>Full Name:</b> activin A receptor, type I	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:150-1:600 IF-P 1:200-1:800
<b>Isotype:</b> IgG2a	<b>Calculated MW:</b> 509 aa, 57 kDa	
<b>Immunogen Catalog Number:</b> AG13508	<b>Observed MW:</b> 57 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b> WB : pig brain tissue, rat brain tissue, NCI-H1299 cells, mouse brain tissue, JAR cells
<b>Cited Applications:</b> WB	<b>IHC :</b> mouse heart tissue, mouse brain tissue
<b>Species Specificity:</b> Human, Pig, Mouse, Rat	<b>IF-P :</b> mouse brain tissue,
<b>Cited Species:</b> human	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

ACVR1 (activin receptor type I), also known as ALK2 or ACTRI, is a receptor for activin. It forms a stable complex with type II receptor after ligand binding. 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. ACVR1 is expressed in many tissues including skeletal muscle and chondrocytes. It functions as a receptor for bone morphogenetic protein (BMP) and induces Indian hedgehog in chondrocytes during skeletal development. Mutations in ACVR1 gene are associated with fibrodysplasia ossificans progressive (PMID: 16642017).

## Notable Publications

Author	Pubmed ID	Journal	Application
Chang Cao	33354912	J Cell Mol Med	WB

## Storage

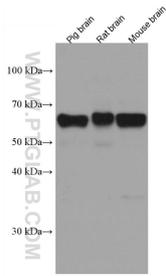
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

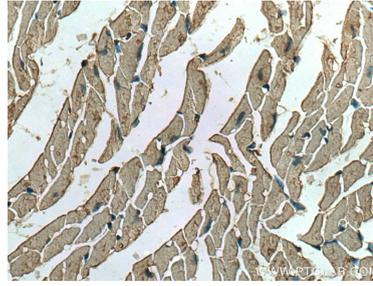
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

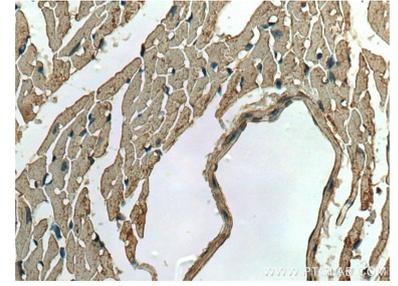
## Selected Validation Data



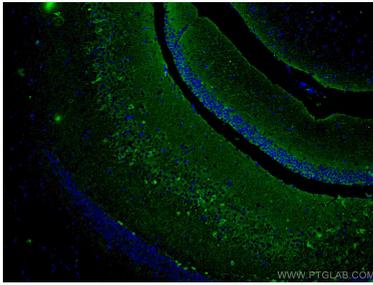
Various lysates were subjected to SDS PAGE followed by western blot with 67417-1-Ig (ACVR1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



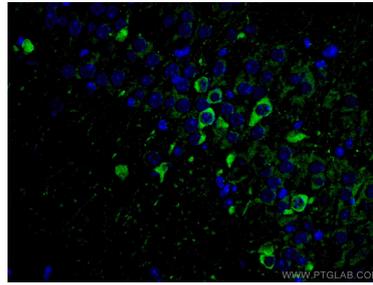
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 67417-1-Ig (ACVR1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 67417-1-Ig (ACVR1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using ACVR1 antibody (67417-1-Ig, Clone: 1F11B10) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using ACVR1 antibody (67417-1-Ig, Clone: 1F11B10) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).