

For Research Use Only

ACVR1 Monoclonal antibody

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



Basic Information

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

Applications

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

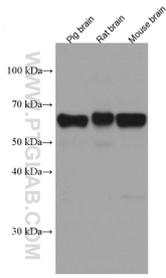
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

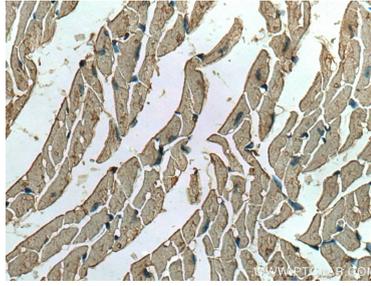
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

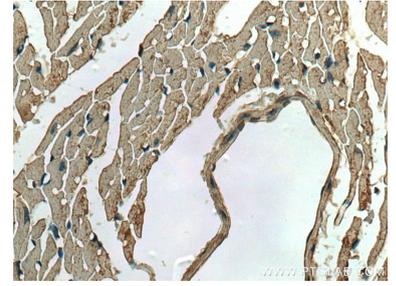
Selected Validation Data



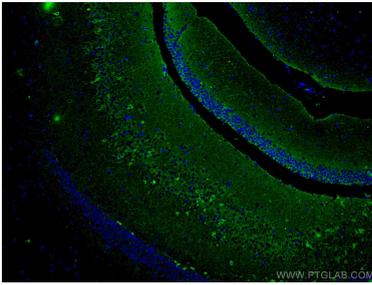
Various lysates were subjected to SDS PAGE followed by western blot with 67417-1-Ig (ACVR1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



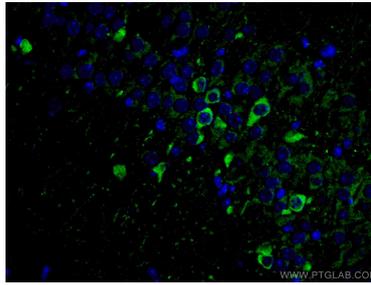
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 67417-1-Ig (ACVR1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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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).