## For Research Use Only

## ACVR1 Monoclonal antibody, PBS Only



Catalog Number: 67417-1-PBS

**Basic Information** 

Catalog Number: 67417-1-PBS

GenBank Accession Number:

BC033867

100ug, Concentration: 1 mg/ml by

GeneID (NCBI):

Protein A purification CloneNo.:

1F11B10

**Purification Method:** 

Nanodrop:

Isotype:

**UNIPROT ID:** Q04771

Mouse

Full Name: activin A receptor, type I

lgG2a

Calculated MW: 509 aa, 57 kDa

Immunogen Catalog Number: AG13508

Observed MW:

57 kDa

**Applications** 

**Tested Applications:** 

WB, IF, IHC, Indirect ELISA

Species Specificity:

Human, Pig, Mouse, Rat

## **Background Information**

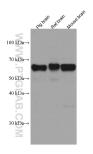
ACVR1 (activin receptor type I), also known as ALK2 or ACTRI, is a receptor for activin. It forms a stable complex with type II receptor after ligand binding. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, 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).

Storage

Storage: Store at -80°C. Storage Buffer:

PBS Only

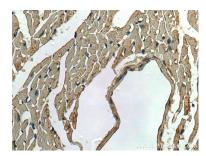
## **Selected Validation Data**



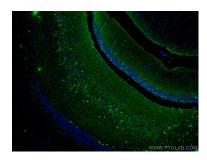
Various lysates were subjected to SDS PAGE followed by western blot with 67417-1-lg (ACVR1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67417-1-PBS in a different storage buffer formulation.



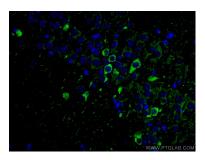
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 67417-1-Ig (ACVR1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67417-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 67417-1-PBS in a different storage buffer formulation.



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 AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67417-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using ACVR1 antibody (67417-1-1g, Clone: 1F11B10) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67417-1-PBS in a different storage buffer formulation.