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Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a)

Recombinant Antibody
Catalog # APR10588

Specification

Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a) - Product Information

Application	**FC, E, FTA**
Primary Accession	Q04771
Reactivity	**Cynomolgus, Human**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**145 KDa**

Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a) - Additional Information

Target/Specificity
ACVR1 / ALK-2

Endotoxin
< 0.001EU/ μg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a) - Protein Information

Name ACVR1

Synonyms ACVRLK2

Function
Bone morphogenetic protein (BMP) type I receptor that is involved in a wide variety of biological processes, including bone, heart, cartilage, nervous, and reproductive system development and regulation (PubMed:20628059, PubMed:22977237). As a type I receptor, forms heterotetrameric receptor complexes with the type II receptors AMHR2, ACVR2A or ACVR2B (PubMed:17911401). Upon binding of ligands such as BMP7 or GDF2/BMP9 to the heteromeric complexes, type II receptors transphosphorylate ACVR1 intracellular domain (PubMed:25354296). In turn,

ACVR1 kinase domain is activated and subsequently phosphorylates SMAD1/5/8 proteins that transduce the signal (PubMed:9748228). In addition to its role in mediating BMP pathway-specific signaling, suppresses TGFbeta/activin pathway signaling by interfering with the binding of activin to its type II receptor (PubMed:17911401). Besides canonical SMAD signaling, can activate non-canonical pathways such as p38 mitogen-activated protein kinases/MAPKs (By similarity). May promote the expression of HAMP, potentially via its interaction with BMP6 (By similarity).

Cellular Location
Membrane; Single-pass type I membrane protein.

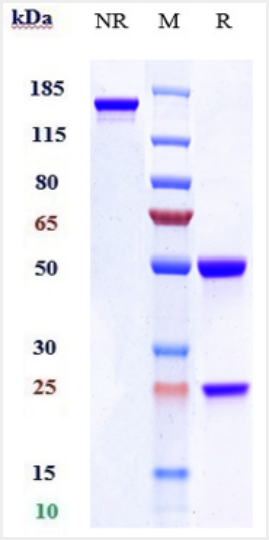
Tissue Location
Expressed in normal parenchymal cells, endothelial cells, fibroblasts and tumor-derived epithelial cells

Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a) - Images



Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%

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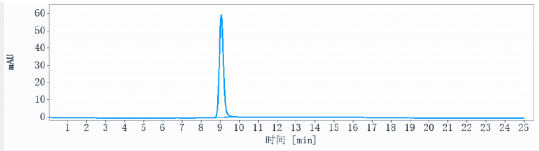

The purity of Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a)is more than 95% ,determined by SEC-HPLC.