

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, Kinetics, Animal Model
Primary Accession	Q04771
Reactivity	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](http://www.uniprot.org/citations/20628059), PubMed: [22977237](http://www.uniprot.org/citations/22977237)). As a type I receptor, forms heterotetrameric receptor complexes with the type II receptors AMHR2, ACVR2A or ACVR2B (PubMed: [17911401](http://www.uniprot.org/citations/17911401)). Upon binding of ligands such as BMP7 or GDF2/BMP9 to the heteromeric complexes, type II receptors transphosphorylate ACVR1 intracellular domain (PubMed: [25354296](http://www.uniprot.org/citations/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

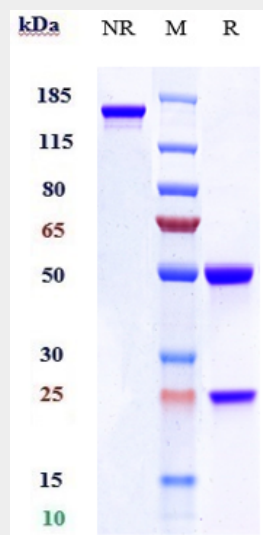
Expressed in normal parenchymal cells, endothelial cells, fibroblasts and tumor-derived epithelial cells

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

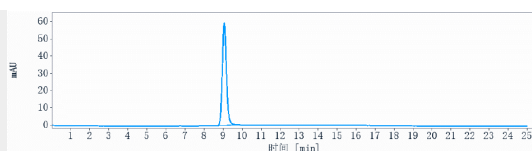
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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%



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