

**Anti-ACVR1 / ALK-2 Reference Antibody (DS-6016a)**  
**Recombinant Antibody**  
**Catalog # APR10588**

**Specification**

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

|                   |                        |
|-------------------|------------------------|
| Application       | FC, E, FTA             |
| Primary Accession | <a href="#">Q04771</a> |
| 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.

**Storage**  
-80°C for 2 years under sterile conditions □ -20°C for 1 year under sterile conditions □ Avoid repeated freeze-thaw cycles.

**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:<a href="http://www.uniprot.org/citations/20628059" target="\_blank">20628059</a>, PubMed:<a href="http://www.uniprot.org/citations/22977237" target="\_blank">22977237</a>). As a type I receptor, forms heterotetrameric receptor complexes with the type II receptors AMHR2, ACVR2A or ACVR2B (PubMed:<a

[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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

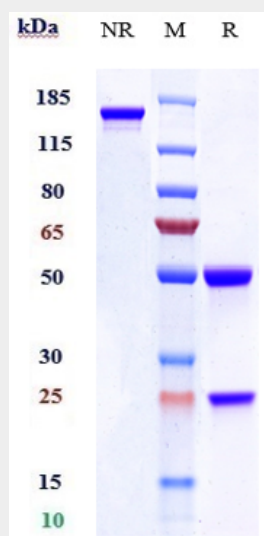
Expressed in normal parenchymal cells, endothelial cells, fibroblasts and tumor-derived epithelial cells

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

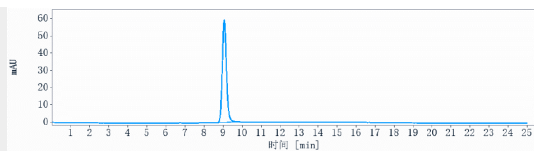
Provided below are standard protocols that you may find useful for product applications.

- [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.