

**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**

&lt; 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:<a href="http://www.uniprot.org/citations/9748228" target="\_blank">9748228</a>). 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:<a href="http://www.uniprot.org/citations/17911401" target="\_blank">17911401</a>). 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

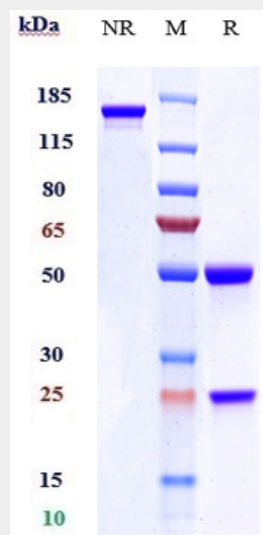
Expressed in normal parenchymal cells, endothelial cells, fibroblasts and tumor-derived epithelial cells

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

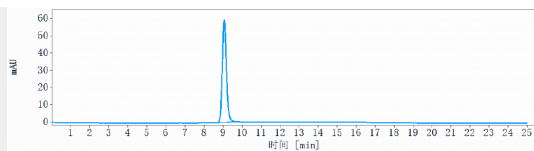
Provided below are standard protocols that you may find useful for product applications.

- [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.