

**Goat anti-ACVR1, Biotinylated Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF4427a****Specification**

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**Goat anti-ACVR1, Biotinylated Antibody - Product Information**

Application	WB, IHC, Pep-ELISA
Primary Accession	<a href="#">Q04771</a>
Other Accession	<a href="#">NP_001096.1</a>
Reactivity	Human, Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	57153

**Goat anti-ACVR1, Biotinylated Antibody - Additional Information****Gene ID 90****Other Names**

ACVR1; activin A receptor type 1; ACTRI; ACVR1A; ACVRLK2; ALK2; FOP; SKR1; TSRI; TGF-B superfamily receptor type I; activin A receptor type I; activin A receptor, type I; activin A receptor, type II-like kinase 2; activin receptor type I; activin receptor

**Dilution**

WB~~1:1000  
IHC~~1:100~500  
Pep-ELISA~~N/A

**Format**

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

**Immunogen**

Reported variants represent identical protein: NP\_001096.1, NP\_001104537.1

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat anti-ACVR1, Biotinylated Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat anti-ACVR1, Biotinylated Antibody - 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 href="http://www.uniprot.org/citations/17911401" target="\_blank">17911401</a>). Upon binding of ligands such as BMP7 or GDF2/BMP9 to the heteromeric complexes, type II receptors transphosphorylate ACVR1 intracellular domain (PubMed:<a href="http://www.uniprot.org/citations/25354296" target="\_blank">25354296</a>). 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

## Goat anti-ACVR1, Biotinylated Antibody - 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](#)

## Goat anti-ACVR1, Biotinylated Antibody - Images