

# Goat anti-ACVR1, Biotinylated Antibody

Peptide-affinity purified goat antibody

Catalog # AF4427a

## Product Information

---

<b>Application</b>	WB, IHC, Pep-ELISA
<b>Primary Accession</b>	<a href="#">Q04771</a>
<b>Other Accession</b>	<a href="#">NP_001096.1</a>
<b>Reactivity</b>	Human, Mouse, Rat, Dog
<b>Host</b>	Goat
<b>Clonality</b>	Polyclonal
<b>Clone Names</b>	ACVR1
<b>Calculated MW</b>	57153

## Additional Information

---

<b>Gene ID</b>	90
<b>Other Names</b>	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
<b>Dilution</b>	WB~~1:1000 IHC~~1:100~500 Pep-ELISA~~N/A
<b>Format</b>	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.
<b>Immunogen</b>	Reported variants represent identical protein: NP_001096.1, NP_001104537.1
<b>Storage</b>	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.
<b>Precautions</b>	Goat anti-ACVR1, Biotinylated Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	ACVR1
<b>Synonyms</b>	ACVRLK2
<b>Function</b>	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="#">20628059</a> ,

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.