

## **Product datasheet for TA356425**

#### OriGene Technologies, Inc.

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### Activin Receptor Type IA (ACVR1) Rabbit Polyclonal Antibody

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** The immunogen is a synthetic peptide directed towards the N terminal region of human

ACVR1

Specificity: Expected reactivity: Cow, Goat, Guinea Pig, Horse, Human, Mouse, Pig, Rabbit, Rat

Homology: Cow: 100%; Goat: 100%; Guinea Pig: 93%; Horse: 100%; Human: 100%; Mouse:

100%; Pig: 100%; Rabbit: 100%; Rat: 100%

Formulation: Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2%

sucrose.

Note that this product is shipped as lyophilized powder to China customers.

**Concentration:** lot specific

Purification: Affinity Purified
Conjugation: Unconjugated

**Storage:** For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small

aliquots to prevent freeze-thaw cycles.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: 55kDa

**Gene Name:** activin A receptor type 1

Database Link: NP 001096

Entrez Gene 11477 MouseEntrez Gene 90 Human

Q04771





Background:

Activin receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. ACVR1 is activin A type I receptor which signals a particular transcriptional response in concert with activin type II receptors. Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. This gene encodes activin A type I receptor which signals a particular transcriptional response in concert with activin type II receptors. Mutations in this gene are associated with fibrodysplasia ossificans progressive.

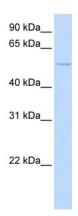
Synonyms: ACTR-I; ACTRI; ACVR1A; ACVRLK2; ALK-2; ALK2; FOP; OTTHUMP00000204604;

OTTHUMP00000204626; SKR1; TSR-I; TSRI

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

**Protein Pathways:** Cytokine-cytokine receptor interaction, TGF-beta signaling pathway

# **Product images:**



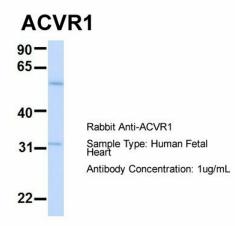
WB Suggested Anti-ACVR1 Antibody Titration: 0.2-

1 ug/ml

ELISA Titer: 1:312500

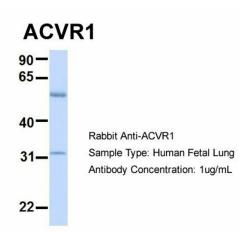
Positive Control: Transfected 293T





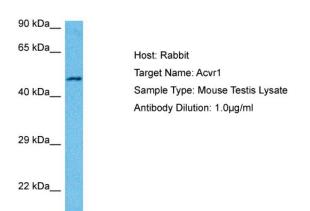
Host: Rabbit Target Name: ACVR1

Sample Type: Human Fetal Heart Antibody Dilution: 1.0ug/ml



Host: Rabbit Target Name: ACVR1

Sample Type: Human Fetal Lung Antibody Dilution: 1.0ug/ml



Host: Mouse Target Name: ACVR1 Sample Tissue: Mouse Testis Antibody Dilution: 1ug/ml