

# Product datasheet

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# ARG40271 anti-ACVR1 / ALK2 antibody

Package: 100 μl Store at: -20°C

## Summary

Clonality

Product Description Rabbit Polyclonal antibody recognizes ACVR1 / ALK2

Polyclonal

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Bov

Tested Application IHC-P, WB

Host Rabbit

Isotype IgG

Target Name ACVR1 / ALK2

Species Human

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 132-162 of Human ACVR1 / ALK2.

Conjugation Un-conjugated

Alternate Names ALK2; ACTRI; FOP; Serine/threonine-protein kinase receptor R1; Activin receptor type I; EC 2.7.11.30;

Activin receptor-like kinase 2; TSRI; ACVRLK2; Activin receptor type-1; SKR1; ACVR1A; ACTR-I; TGF-B

superfamily receptor type I; TSR-I; ALK-2

### **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:50 - 1:100
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	U937	
Observed Size	~ 57 kDa	

#### **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS and 0.09% (W/V) Sodium azide.

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol ACVR1

Gene Full Name activin A receptor, type I

Background 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. [provided by RefSeq, Jul 2008]

**Function** On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane

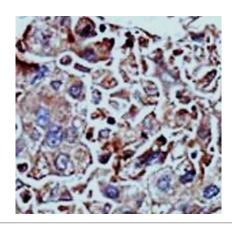
serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for activin. May

be involved for left-right pattern formation during embryogenesis (By similarity). [UniProt]

Calculated Mw 57 kDa

Cellular Localization Membrane; Single-pass type I membrane protein. [UniProt]

### **Images**



#### ARG40271 anti-ACVR1 / ALK2 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human hepatocarcinoma stained with ARG40271 anti-ACVR1 / ALK2 antibody.



#### ARG40271 anti-ACVR1 / ALK2 antibody WB image

Western blot: 35  $\mu g$  of U937 cell lysate stained with ARG40271 anti-ACVR1 / ALK2 antibody.