

Datasheet for 600-401-X67**ACVR1B Antibody****Overview**

Description:	Anti-ACVR1B (RABBIT) Antibody - 600-401-X67
Item No.:	600-401-X67
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

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 and two type II receptors. ACVR1B, also known as activin receptor-like kinase 4 (ALK4), is a type I receptor for activin and plays major roles in cell differentiation, growth arrest and apoptosis. Like another type I activin receptor ACVR1C, ACVR1B can mediate signaling by ligands such as Nodal, Xnr1, GDF-1/3, activin B and activin AB. In <i>Xenopus</i> embryos, expression of a dominant-negative form of ACVR1B blocked all mesoderm-inducing ligands, while expression of a dominant negative ACVR1C only blocked Nodal and Xnr1 signaling, suggesting that the ACVR1B and ACVR1C possess distinct functions.
Synonyms:	ACVR1B Antibody, FOP, ALK2, SKR1, TSRI, ACTRI, ACVR1A, ACVRLK2, Activin receptor type-1, Activin receptor type I, ACTR-I
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ACVR1
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ACVR1B antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the C-terminus of the human ACVR1B.
Purity/Specificity:	Anti-ACVR1B Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least three isoforms of ACVR1B are known to exist. This antibody is predicted to have no cross-reactivity to ACVR1 or ACVR1C.
Relevant Links:	• UniProtKB - Q04771 • GeneID - 90 • NCBI - NP_001096

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-ACVR1B Antibody has been tested for use in ELISA and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~57 kDa in size corresponding to the molecular weight of the ACVR1B protein by Western Blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1 µg/mL

Formulation

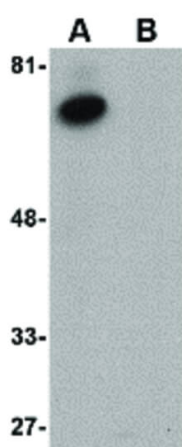
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of ACVR1B antibody. Lane A: Human kidney tissue lysate in the absence of blocking peptide. Lane B: Human kidney tissue lysate in the presence of blocking peptide. Load: 35 µg per lane. Primary Antibody: Anti-ACVR1B at 1 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 57.1 kDa, ~75 kDa for ACVR1B.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.