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Datasheet for 600-401-X68

ACVR1C Antibody

Overview

Description:	Anti-ACVR1C (RABBIT) Antibody - 600-401-X68
Item No.:	600-401-X68
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Mouse, Rat
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. ACVR1C, also known as ALK7, is a type I activin receptor and plays a role in cell differentiation, growth arrest and apoptosis. ACVR1C can mediate signaling by ligans such as Nodal, GDF-1/3, activin B and activin AB, all of which can also signal through the ubiquitous activin type I receptor ACVR1B (also known as ALK4). ACVR1C is a novel marker specifically expressed during the late phase of adipocyte differentiation. ACVR1C is dispensable for mouse embryogenesis, which suggests alternative functions for this receptor in postnatal development and tissue homeostasis. ACVR1C plays an important role in regulating the functional plasticity of pancreatic islets, negatively affecting beta-cell function by mediating the effects of activin B on Ca2+ signaling.
Synonyms:	ACVR1C 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, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ACVR1C antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the N-terminus of the human ACVR1C.
Purity/Specificity:	Anti-ACVR1C Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is predicted to have no cross-reactivity to ACVR1 or ACVR1B.
Relevant Links:	• UniProtKB - Q04771 • GeneID - 90 • NCBI - NP_001096

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-ACVR1C 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 ACVR1C 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:	1:10,000-1:20,000
WB:	1-2 µg/mL

Formulation

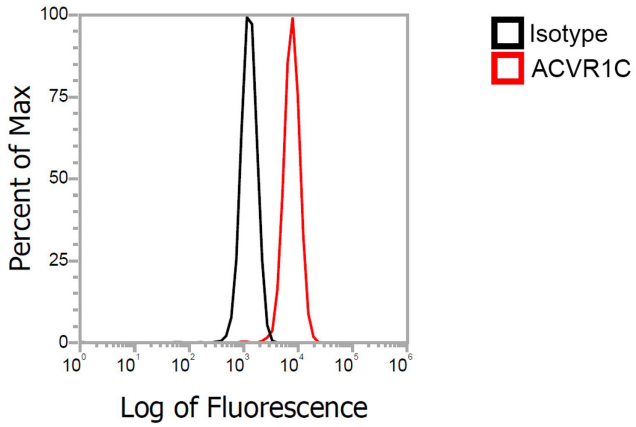
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

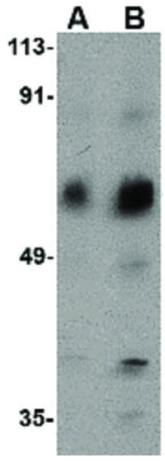
Shipping Condition:	Dry Ice

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



Flow Cytometry
Flow Cytometry of ACVR1C in THP-1 Cells. 1X10^6/mL THP-1 cells were intracellularly stained with 2 µg/mL of ACVR1C antibody (red) or Rabbit IgG isotype control (black) at RT for 30 min, followed by PSFlo 488 conjugated goat anti-rabbit IgG secondary antibody staining (1:1000) at RT for 30 min. Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100 in PBS.



Western Blot
Western Blot of ACVR1C antibody. Lane A: Human placenta tissue lysate at 1 µg/mL. Lane B: Human placenta tissue lysate at 2 µg/mL. Load: 35 µg per lane. 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, ~57 kDa for ACVR1C. Other band(s): ACVR1C splice variants and isoforms.

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.