

Anti-Activin receptor type-1B ACVR1B Antibody

Catalog Number: A02882

Introduction

CD3epsilon is a 20kD chain, which together with CD3lambda, CD3delta, and CD3zeta, and a T cell receptor (alpha/beta or gamma/delta) form the CD3/T-cell receptor complex. It is a specific marker for T lymphocytes, NK T cells, and some thymocytes. Crosslinking of TCR initiates an intracellular signaling cascade resulting in cellular activation and proliferation. The OKT3 antibody has been reported to have potent immunosuppressive properties in vivo and has been proved effective in the treatment of renal, heart, and liver allograft rejection.

This antibody is routinely tested by flow cytometric analysis. Flow cytometry and other applications were tested during antibody development or are reported in the literature.

Application Information

Each lot of this antibody has been quality control tested by flow cytometric analysis of human PBMCs. For flow cytometric staining, the recommended use of this antibody is $\leq 0.5\mu\text{g}$ per 1×10^6 cells in $100\mu\text{l}$ of staining volume followed by a secondary fluorescent conjugated anti-mouse antibody. However, it is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

About ACVR1B

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 *Xenopus* 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.

Overview

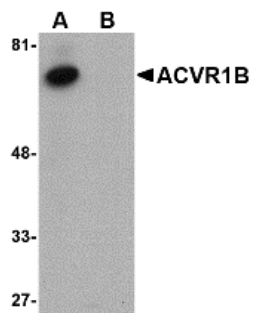
Product Name	Anti-Activin receptor type-1B ACVR1B Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-Activin receptor type-1B ACVR1B Antibody (Catalog # A02882). Tested in ELISA, WB applications. This antibody reacts with Human, Mouse.
Conjugate	Biotin
Application	ELISA, WB
Clonality	Polyclonal SK7
Formulation	ACVR1B Antibody is supplied in PBS containing 0.02% sodium azide.

Storage Instructions	ACVR1B antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	P36896

Technical Details

Immunogen	ACVR1B antibody was raised against a 14 amino acid synthetic peptide near the carboxy terminus of the human ACVR1B. The immunogen is located within amino acids 140 - 190 of ACVR1B.
Predicted Reactive Species	Rat
Cross Reactivity	At least three isoforms of ACVR1B are known to exist. This antibody is predicted to have no cross-reactivity to ACVR1 or ACVR1C.
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL
Purification	ACVR1B Antibody is affinity chromatography purified via peptide column.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>ACVR1B antibody can be used for detection of ACVR1B by Western blot at 1 ug/mL.</p> <p>Antibody validated: Western Blot in human samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.</p>

Anti-Activin receptor type-1B ACVR1B Antibody (A02882) Images



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