

Datasheet for ABIN392231

## anti-Activin A Receptor Type IB/ALK-4 antibody (N-Term)



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### 4 Images

#### Overview

Quantity:	400 µL
Target:	Activin A Receptor Type IB/ALK-4 (ACVR1B)
Binding Specificity:	AA 39-68, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Flow Cytometry (FACS)

#### Product Details

Immunogen:	This Activin A Receptor Type IB (ACVR1B) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-68 amino acids from the N-terminal region of human Activin A Receptor Type IB (ACVR1B).
Clone:	RB3740
Isotype:	Ig Fraction
Predicted Reactivity:	Rat
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Target Details

Target:	Activin A Receptor Type IB/ALK-4 (ACVR1B)
Alternative Name:	Activin A Receptor Type IB (ACVR1B) ( <a href="#">ACVR1B Products</a> )

## Target Details

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**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 a 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. The gene for ACVR1B (activin A type IB receptor) is composed of 11 exons. Alternative splicing and alternative polyadenylation result in 3 fully described transcript variants. The mRNA expression of variants 1, 2, and 3 is confirmed, and a potential fourth variant contains an alternative exon 8 and lacks exons 9 through 11, but its mRNA expression has not been confirmed.

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**Molecular Weight:** 56807

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**Gene ID:** 91

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**NCBI Accession:** [NP\\_004293](#), [NP\\_064732](#), [NP\\_064733](#)

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**UniProt:** [P36896](#)

## Application Details

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**Application Notes:** WB: 1:1000. WB: 1:1000. WB: 1:1000. FC: 1:25

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**Restrictions:** For Research Use only

## Handling

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**Format:** Liquid

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**Buffer:** Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

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**Preservative:** Sodium azide

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**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

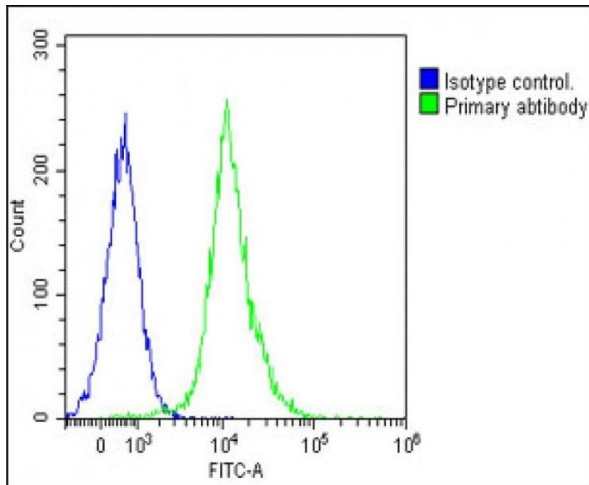
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**Storage:** 4 °C, -20 °C

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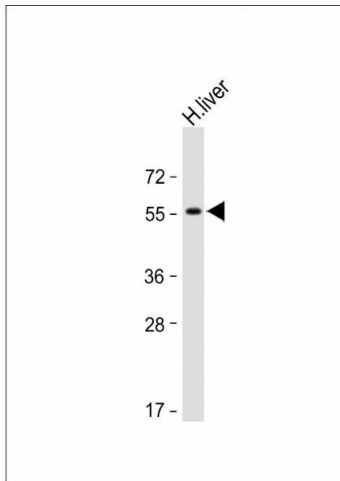
**Storage Comment:** Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.

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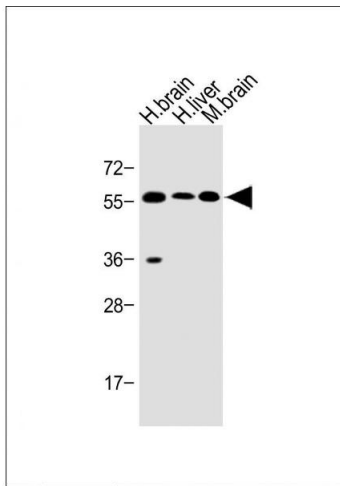
### Flow Cytometry

**Image 1.** Overlay histogram showing Jurkat cells stained with (ABIN392231 and ABIN2841925)(green line). The cells were fixed with 2 % paraformaldehyde and then permeabilized with 90 % methanol for 10 min. The cells were then incubated in 2 % bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37 °C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10, 000 events was performed.



### Western Blotting

**Image 2.** Anti-Activin A Receptor Type 1B (ACVR1B) Antibody (N-term) at 1:1000 dilution + Human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5 % NFDN/TBST.



### Western Blotting

**Image 3.** All lanes : Anti-Activin A Receptor Type 1B (ACVR1B) Antibody (N-term) at 1:1000 dilution Lane 1: Human brain lysate Lane 2: Human liver lysate Lane 3: Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5 % NFDm/TBST.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN392231.