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Datasheet for ABIN6243025  
**anti-PRAS40 antibody**

1 Image

### Overview

Quantity:	200 µL
Target:	PRAS40 (AKT1S1)
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PRAS40 antibody is un-conjugated
Application:	Western Blotting (WB)

### Product Details

Immunogen:	This AKT1S1 antibody is generated from a mouse immunized with a recombinant protein from the human region of human AKT1S1.
Clone:	1997CT730-74-73
Isotype:	IgG1 kappa
Predicted Reactivity:	H, M
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

### Target Details

Target:	PRAS40 (AKT1S1)
Alternative Name:	AKT1S1 ( <a href="#">AKT1S1 Products</a> )
Background:	Subunit of mTORC1, which regulates cell growth and survival in response to nutrient and

## Target Details

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hormonal signals. mTORC1 is activated in response to growth factors or amino acids. Growth factor-stimulated mTORC1 activation involves a AKT1-mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that potently activates the protein kinase activity of mTORC1. Amino acid-signaling to mTORC1 requires its relocalization to the lysosomes mediated by the Ragulator complex and the Rag GTPases. Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. mTORC1 phosphorylates EIF4EBP1 and releases it from inhibiting the elongation initiation factor 4E (eIF4E). mTORC1 phosphorylates and activates S6K1 at 'Thr-389', which then promotes protein synthesis by phosphorylating PDCD4 and targeting it for degradation. Within mTORC1, AKT1S1 negatively regulates mTOR activity in a manner that is dependent on its phosphorylation state and binding to 14-3-3 proteins. Inhibits RHEB-GTP-dependent mTORC1 activation. Substrate for AKT1 phosphorylation, but can also be activated by AKT1-independent mechanisms. May also play a role in nerve growth factor-mediated neuroprotection.

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Molecular Weight: 27383

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UniProt: [Q96B36](#)

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Pathways: [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Regulation of Cell Size](#), [Autophagy](#), [BCR Signaling](#), [Warburg Effect](#)

## Application Details

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Application Notes: WB: 1:500-1:4000

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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

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Preservative: Sodium azide

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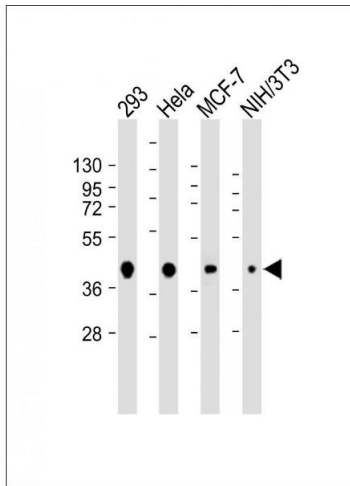
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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Storage: 4 °C,-20 °C

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Expiry Date: 6 months



### Western Blotting

**Image 1.** All lanes : Anti-AKT1S1 Antibody at 1:500-1:4000 dilution Lane 1: 293 whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5 % NFDN/TBST.