

Datasheet for ABIN7164755  
**anti-PRAS40 antibody (AA 52-101)**

## 3 Images

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## Overview

Quantity:	100 µg
Target:	PRAS40 (AKT1S1)
Binding Specificity:	AA 52-101
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRAS40 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

## Product Details

Immunogen:	Recombinant Human Proline-rich AKT1 substrate 1 protein (52-101AA)
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Purification:	>95%, Protein G purified

## Target Details

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

## Target Details

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.

Aliases: 40 kDa proline rich AKT substrate antibody, 40 kDa proline-rich AKT substrate antibody, AKT1 S1 antibody, AKT1 substrate 1 (proline rich) antibody, AKT1 substrate 1 antibody, AKT1S1 antibody, AKT1S1 antibody, AKTS1\_HUMAN antibody, Lobe antibody, MGC2865 antibody, PRAS 40 antibody, PRAS antibody, PRAS40 antibody, Proline rich akt substrate antibody, Proline rich Akt substrate 40 kDa antibody, Proline-rich AKT1 substrate 1 antibody

UniProt: [Q96B36](#)

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

## Application Details

Application Notes: Recommended dilution: WB:1:200-1:3000, IHC:1:20-1:200,

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300  
Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4

Preservative: ProClin

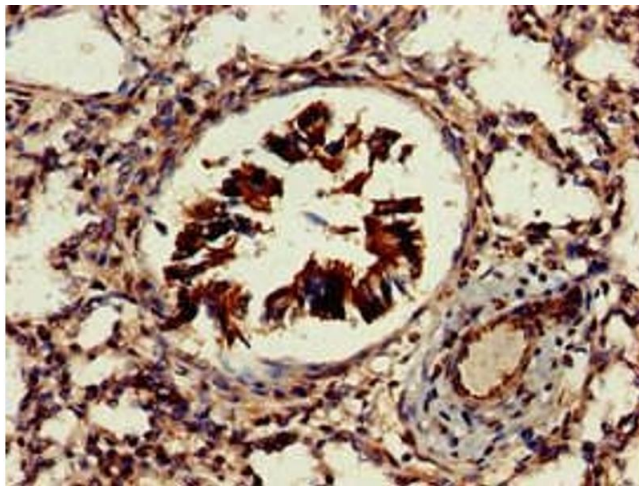
Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Handling

Storage: -20 °C, -80 °C

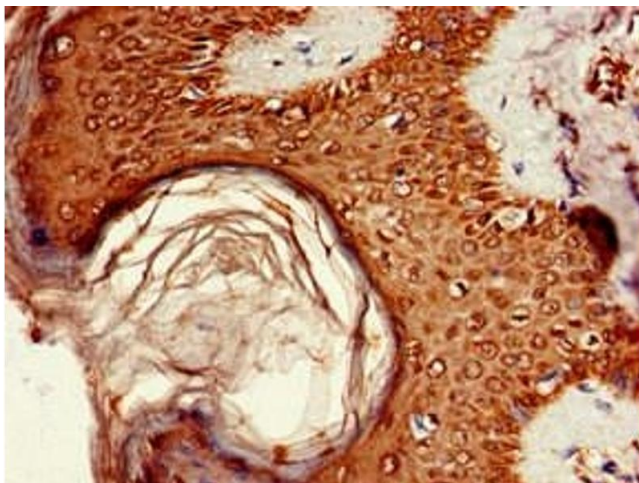
Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



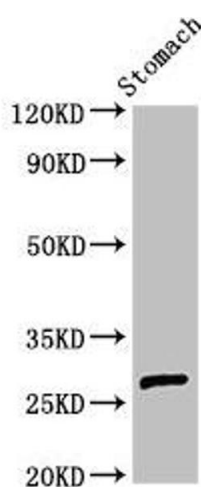
### Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded human lung tissue using ABIN7164755 at dilution of 1:100



### Immunohistochemistry

**Image 2.** Immunohistochemistry of paraffin-embedded human skin tissue using ABIN7164755 at dilution of 1:100



### Western Blotting

**Image 3.** Western Blot Positive WB detected in: Rat stomach tissue All lanes: AKT1S1 antibody at 3 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 28, 14, 30 kDa Observed band size: 28 kDa