

# PRAS40 Antibody

Rabbit mAb

Catalog # AP91334

## Product Information

<b>Application</b>	WB, IHC, FC, IP
<b>Primary Accession</b>	<a href="#">Q96B36</a>
<b>Reactivity</b>	Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	40 kDa proline rich AKT substrate; AKT1 S1; AKT1 substrate 1 (proline rich); AKT1S1; Lobe; PRAS40; Proline rich akt substrate;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	27383

## Additional Information

<b>Dilution</b>	WB 1:500~1:2000 IHC 1:50~1:200 IP 1:50 FC 1:50
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human PRAS40
<b>Description</b>	PRAS40 interacts with Raptor in mTOR complex 1 (mTORC1) in insulin-deprived cells and inhibits the activation of the mTORC1 pathway mediated by the cell cycle protein Rheb. Phosphorylation of PRAS40 by Akt at Thr246 relieves PRAS40 inhibition of mTORC1. mTORC1 in turn phosphorylates PRAS40 at Ser183.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

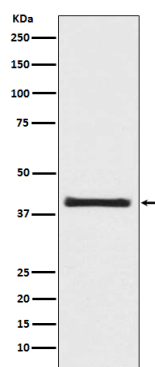
## Protein Information

<b>Name</b>	AKT1S1 {ECO:0000312   EMBL:AAH16043.1}
<b>Function</b>	Negative regulator of the mechanistic target of rapamycin complex 1 (mTORC1), an evolutionarily conserved central nutrient sensor that stimulates anabolic reactions and macromolecule biosynthesis to promote cellular biomass generation and growth (PubMed: <a href="#">17277771</a> , PubMed: <a href="#">17386266</a> , PubMed: <a href="#">17510057</a> , PubMed: <a href="#">29236692</a> ). In absence of insulin and nutrients, AKT1S1 associates with the mTORC1 complex and directly inhibits mTORC1 activity by blocking the MTOR substrate- recruitment site (PubMed: <a href="#">29236692</a> ). In response to insulin and nutrients, AKT1S1 dissociates from mTORC1 (PubMed: <a href="#">17386266</a> , PubMed: <a href="#">18372248</a> ). Its activity is dependent on its phosphorylation state and binding to 14-3-3 (PubMed: <a href="#">16174443</a> , PubMed: <a href="#">18372248</a> ). May also play a role in nerve growth factor-mediated neuroprotection (By similarity).

<b>Cellular Location</b>	Cytoplasm, cytosol {ECO:0000250 UniProtKB:Q9D1F4}. Note=Found in the cytosolic fraction of the brain. {ECO:0000250 UniProtKB:Q9D1F4}
<b>Tissue Location</b>	Widely expressed with highest levels of expression in liver and heart. Expressed at higher levels in cancer cell lines (e.g. A-549 and HeLa) than in normal cell lines (e.g. HEK293)

## Images

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Western blot analysis of PRAS40 expression in 293T cell lysate.

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