

# Anti-PRAS40 Antibody

Rabbit polyclonal antibody to PRAS40

Catalog # AP60425

## Product Information

Application	WB, IHC
Primary Accession	<a href="#">Q96B36</a>
Other Accession	<a href="#">Q9D1F4</a>
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27383

## Additional Information

Gene ID	84335
Other Names	PRAS40; Proline-rich AKT1 substrate 1; 40 kDa proline-rich AKT substrate
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human PRAS40. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

Name	AKT1S1 {ECO:0000312   EMBL:AAH16043.1}
Function	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).

**Cellular Location**

Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9D1F4}. Note=Found in the cytosolic fraction of the brain. {ECO:0000250|UniProtKB:Q9D1F4}

**Tissue Location**

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)

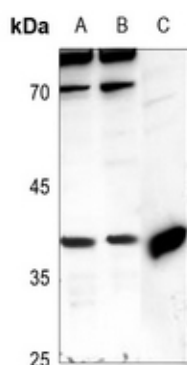
**Background**

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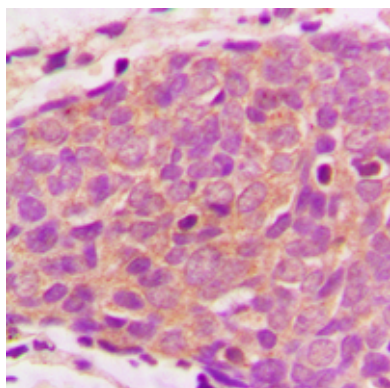
KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human PRAS40. The exact sequence is proprietary.

**Images**

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Western blot analysis of PRAS40 expression in HepG2 (A), EC9706 (B), rat kidney (C) whole cell lysates.



Immunohistochemical analysis of PRAS40 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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