

**Anti-PRAS40 AKT1S1 Rabbit Monoclonal Antibody**  
Catalog # ABO13879

**Specification**

**Anti-PRAS40 AKT1S1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IP, FC
Primary Accession	<a href="#">Q96B36</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-PRAS40 AKT1S1 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

**Anti-PRAS40 AKT1S1 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 84335

**Other Names**

Proline-rich AKT1 substrate 1, 40 kDa proline-rich AKT substrate, AKT1S1  
{ECO:0000312|EMBL:AAH16043.1}

**Calculated MW**

27383 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>IP 1:50<br>FC 1:50

**Subcellular Localization**

Cytoplasm, cytosol. Found in the cytosolic fraction of the brain..

**Tissue Specificity**

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)..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human PRAS40

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

up to one month. Avoid repeated  
freeze-thaw cycles.

## Anti-PRAS40 AKT1S1 Rabbit Monoclonal Antibody - 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="http://www.uniprot.org/citations/17277771" target="\_blank">17277771</a>, PubMed:<a href="http://www.uniprot.org/citations/17386266" target="\_blank">17386266</a>, PubMed:<a href="http://www.uniprot.org/citations/17510057" target="\_blank">17510057</a>, PubMed:<a href="http://www.uniprot.org/citations/29236692" target="\_blank">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="http://www.uniprot.org/citations/29236692" target="\_blank">29236692</a>). In response to insulin and nutrients, AKT1S1 dissociates from mTORC1 (PubMed:<a href="http://www.uniprot.org/citations/17386266" target="\_blank">17386266</a>, PubMed:<a href="http://www.uniprot.org/citations/18372248" target="\_blank">18372248</a>). Its activity is dependent on its phosphorylation state and binding to 14-3-3 (PubMed:<a href="http://www.uniprot.org/citations/16174443" target="\_blank">16174443</a>, PubMed:<a href="http://www.uniprot.org/citations/18372248" target="\_blank">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

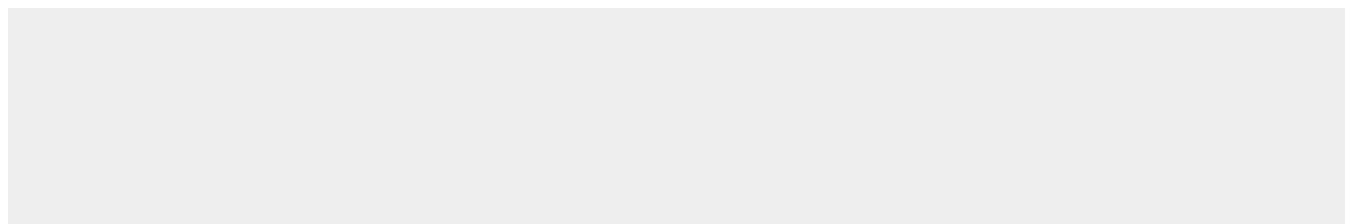
Widely expressed with highest levels of expression in liver and heart. Expressed at higher levels in cancer cell lines (e.g. A-549 and HeLa) than in normal cell lines (e.g. HEK293)

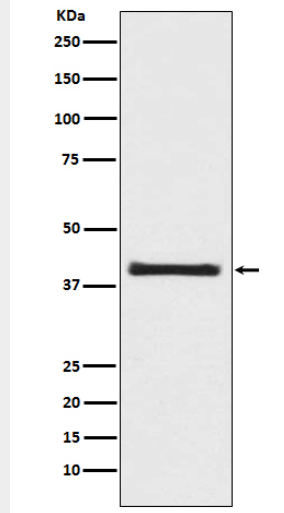
## Anti-PRAS40 AKT1S1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-PRAS40 AKT1S1 Rabbit Monoclonal Antibody - Images





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