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KD-Validated Anti-Phospho-PRAS40 (T246) Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1360

Specification

KD-Validated Anti-Phospho-PRAS40 (T246) Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q96B36
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 27 kDa , observed, 40 kDa KDa**
Gene Name	**AKT1S1**
Aliases	**AKT1S1; AKT1 Substrate 1; PRAS40; 40 KDa Proline-Rich AKT Substrate; Proline-Rich AKT1 Substrate 1; MGC2865; Lobe; Proline-Rich Akt Substrate, 40 KDa; AKT1 Substrate 1 (Proline-Rich); AKT1 Substrate 1 (Proline Rich); LOBE**
Immunogen	**A synthesized peptide derived from human Phospho-PRAS40 (T246)**

KD-Validated Anti-Phospho-PRAS40 (T246) 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}

KD-Validated Anti-Phospho-PRAS40 (T246) 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:17277771, PubMed:17386266, PubMed:17510057, PubMed:29236692). 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:29236692). In response to insulin and nutrients, AKT1S1 dissociates from mTORC1 (PubMed:<a

href="http://www.uniprot.org/citations/17386266" target="_blank">17386266, PubMed:18372248). Its activity is dependent on its phosphorylation state and binding to 14-3-3 (PubMed:16174443, PubMed:18372248). 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}

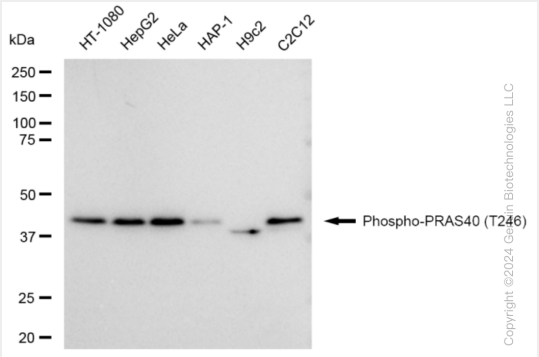
Tissue Location
Widely expressed with highest levels of expression in liver and heart. Expressed at higher levels in cancer cell lines (e.g. A-549 and HeLa) than in normal cell lines (e.g. HEK293)

KD-Validated Anti-Phospho-PRAS40 (T246) 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 Cytomety
- Cell Culture

KD-Validated Anti-Phospho-PRAS40 (T246) Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Phospho-PRAS40 (T246) antibody (Cat#AGI1360). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Phospho-PRAS40 (T246) antibody (Cat#AGI1360, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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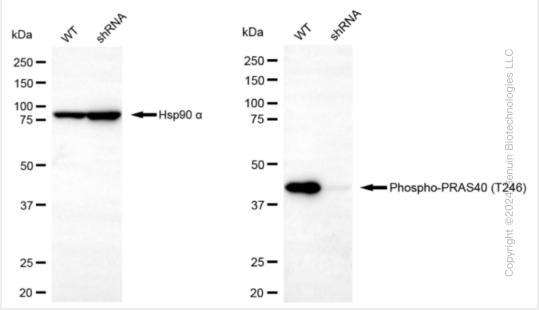
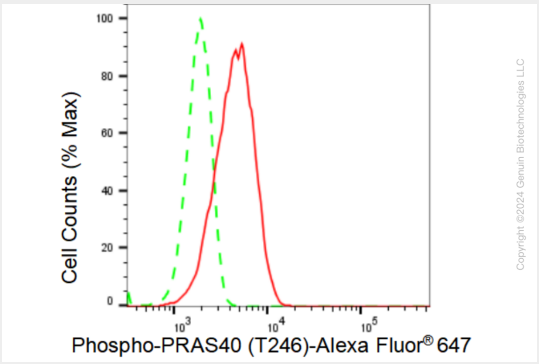
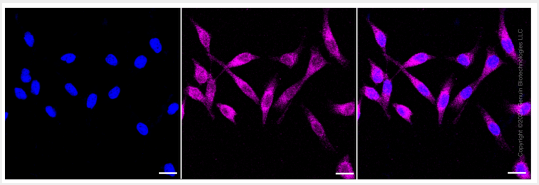


Western blotting analysis using anti-Phospho-PRAS40 (T246) antibody (Cat#AGI1360). Phospho-PRAS40 (T246) expression in wild type (WT) and Phospho-PRAS40 (T246) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Phospho-PRAS40 (T246) antibody (Cat#AGI1360, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Phospho-PRAS40 (T246) expression in HeLa cells using Phospho-PRAS40 (T246) antibody (Cat#AGI1360, 1:2,000). Green, isotype control; red, Phospho-PRAS40 (T246).



Immunocytochemical staining of HeLa cells with Phospho-PRAS40 (T246) antibody (Cat#AGI1360, 1:1,000). Nuclei were stained blue with DAPI; Phospho-PRAS40 (T246) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.