

## [KD Validated] Anti-AKT1S1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

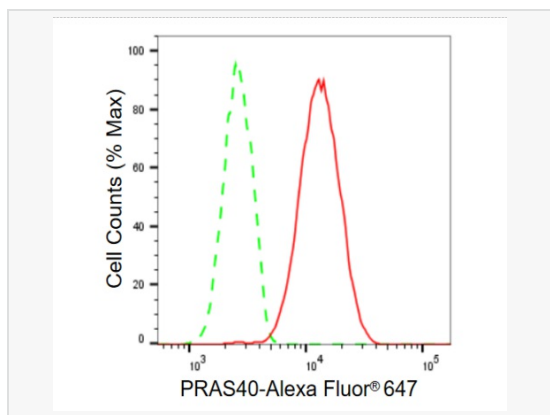
Catalog # R020480

### Product Information

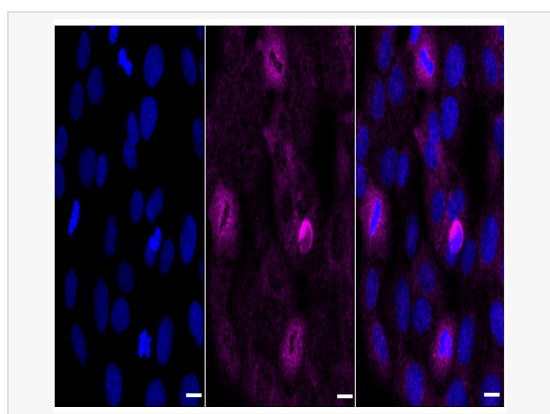
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	90J10R96
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human PRAS40
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-AKT1S1 Rabbit mAb [90J10R96] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

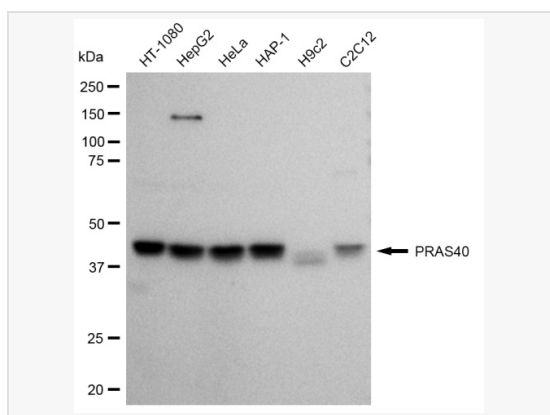
Synonyms	AKT1 Substrate 1; PRAS40; Lobe; 40 kDa Proline-Rich AKT Substrate; Proline-Rich AKT1 Substrate 1; MGC2865; Proline-Rich Akt Substrate, 40 kDa; AKT1 Substrate 1 (Proline-Rich); AKT1 Substrate 1 (Proline Rich).
Calculated MW	Calculated MW: 27 kDa, Observed MW: 40 kDa
Uniprot ID	Q96B36
Gene ID	84335
Background	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.



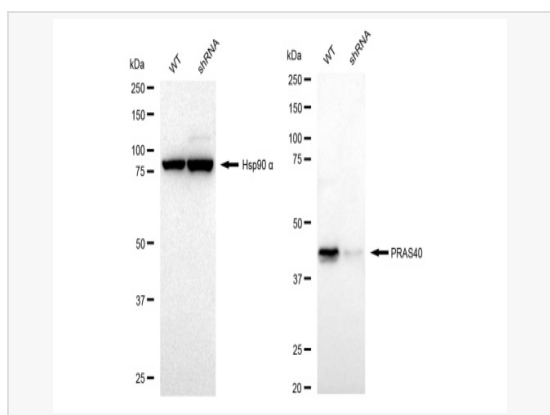
Flow cytometric analysis of PRAS40 expression in HT-1080 cells using PRAS40 antibody (R020480, 1:2,000). Green, isotype control; red, PRAS40.



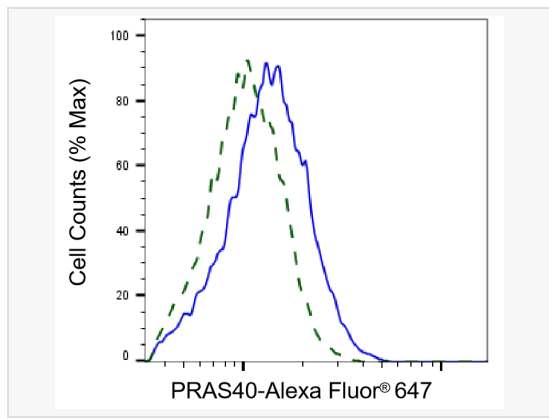
Immunocytochemical staining of HT-1080 cells with PRAS40 antibody (R020480, 1:1,000). Nuclei were stained blue with DAPI; PRAS40 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Western blotting analysis using PRAS40 antibody (R020480). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with pPRAS40 antibody (R020480, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using PRAS40 antibody (R020480). PRAS40 expression in wild type (WT) and PRAS40 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with PRAS40 antibody (R020480, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of PRAS40 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with PRAS40 antibody (R020480, 1:2,000) and analyzed using BD flow cytometer.