Datasheet for ABIN7090740

anti-PRAS40 antibody

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Overview

Quantity:	100 µL
Target:	PRAS40 (AKT1S1)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PRAS40 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	Recombinant human AKT1S1.
Clone:	F6F22
Predicted Reactivity:	Human,Mouse

Target Details

Target:	PRAS40 (AKT1S1)
Alternative Name:	AKT1S1 (AKT1S1 Products)
Background:	Synonyms: PRAS40, AKT1 substrate 1 (proline rich), AKT1 substrate 1, AKT1-S1, AKT1S-1, AKT1S 1, AKT1 S1, Lobe, PRAS 40, PRAS-40, Proline rich akt substrate, 40 kDa proline rich AKT substrate, 40 kDa proline-rich AKT substrate, AKT1 substrate 1, AKTS1_HUMAN, MGC2865, Proline rich Akt substrate 40 kDa, Proline-rich AKT1 substrate 1. Background: Subunit of mTORC1, which regulates cell growth and survival in response to

Target Details

	nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. Growth factor-stimulated mTORC1 activation involves a AKT1-mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that potently activates the protein kinase activity of mTORC1. Amino-acid-signaling to mTORC1 requires its relocalization to the lysosomes mediated by the Ragulator complex and the Rag GTPases. Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. mTORC1 phosphorylates EIF4EBP1 and releases it from inhibiting the elongation initiation factor 4E (eiF4E). mTORC1 phosphorylates and activates S6K1 at 'Thr-389', which then promotes protein synthesis by phosphorylating PDCD4 and targeting it for degradation. Within mTORC1, AKT1S1 negatively regulates mTOR activity in a manner that is dependent on its phosphorylation state and binding to 14-3-3 proteins. Inhibits RHEB-GTP-dependent mTORC1 activation. Substrate for AKT1 phosphorylation, but can also be activated by AKT1-independent mechanisms. May also play a role in nerve growth factor-mediated neuroprotection.
Gene ID:	84335
UniProt:	Q96B36
Pathways:	Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Regulation of Cell Size, Autophagy, BCR Signaling, Warburg Effect

Application Details

Application Notes:	WB 1:300-5000
Restrictions:	For Research Use only

Handling

Concentration:	0.5 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Handling

Expiry Date:	12 months