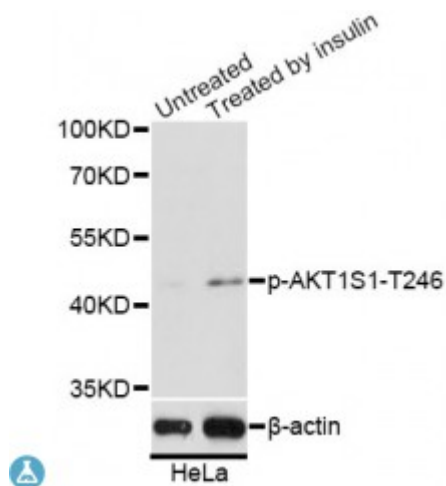


Anti-Phospho-AKT1S1-(T246) Antibody



Model	STJ117891
Host	Rabbit
Reactivity	Human, Mouse
Applications	WB
Immunogen	A synthetic phosphorylated peptide around T246 of human AKT1S1 (NP_001092102.1).
Gene ID	84335
Gene Symbol	AKT1S1
Dilution range	WB 1:500 - 1:2000
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)
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Proline-rich AKT1 substrate 1 40 kDa proline-rich AKT substrate
Molecular Weight	27.383 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.

Database Links	HGNC:28426 OMIM:610221 Reactome:R-HSA-165159
Alternative Names	Proline-rich AKT1 substrate 1 40 kDa proline-rich AKT substrate
Function	Subunit of mTORC1, which regulates cell growth and survival in response to 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,
Cellular Localization	Cytoplasm, cytosol
Post-translational Modifications	Phosphorylated by AKT1 ,

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