

Immunotag™ Phospho-PRAS40 (Ser183) Antibody

Antibody Specification	
Catalog No.	ITA0714
Product Description	Immunotag™ Phospho-PRAS40 (Ser183) Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Phospho-PRAS40 (Ser183)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC
Recommended Dilution	WB 1:500-1:2000, IHC 1:50-1:200
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human PRAS40 around the phosphorylation site of Ser183.
Specificity	Phospho-PRAS40 (Ser183) Antibody detects endogenous levels of PRAS40.
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	AKT1S1
Accession No.	Q96B36
Alternate Names	40 kDa proline rich AKT substrate; 40 kDa proline-rich AKT substrate; AKT1 S1; AKT1 substrate 1 (proline rich); AKT1 substrate 1; AKT1S 1; AKT1S1; AKTS1_HUMAN; Lobe; MGC2865; PRAS 40; PRAS; PRAS40; Proline rich akt substrate; Proline rich Akt substrate 40 kDa; Proline-rich AKT1 substrate 1;

Antibody Specification

Description	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 potentially 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.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	40kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.