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Mouse (monoclonal) Anti-Human PRAS40 Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number:	AHO1031
Lot Number:	See product label
Quantity/Volume:	100 μg/200 μL
Clone Number:	73P21
Isotype:	IgG1 kappa
Form of Antibody:	Purified immunoglobulin in phosphate buffered saline containing 1% BSA.
Preservative:	0.1% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	Purified by Protein A/G affinity chromatography.
Immunogen:	Recombinant full length human PRAS40 expressed in E. coli.
Myeloma/Fusion Partners:	BALB/c mouse splenocytes were fused with FO myeloma cells.
Specificity:	Proline-Rich AKT Substrate (PRAS40) is a 40 kDa substrate of AKT. Activated AKT phosphorylates PRAS40 on threonine 246, enabling PRAS40 to bind to 14-3-3.
	AKT and PRAS40 are components of the phosphoinositide 3-kinase (PI3K) pathway. This pathway plays a role in glucose uptake, cell growth, and apoptosis inhibition. The precise function of PRAS40 is not yet known; however, it has been hypothesized that PRAS40 interacts with SH3 and WW domain containing proteins, and may change the function of these proteins.
	In Western blot analysis with HeLa cell extracts, this antibody reacts with a 40 kDa band. This band is absent from PRAS40 siRNA-treated HeLa cell extracts.
Species Reactivity:	Human. This antibody does not cross-react with mouse. Other species were not tested.
Applications:	The antibody has been used for Western blotting applications and immunoprecipitation.
Suggested Working Dilutions:	For Western blotting applications, we recommend using the antibody at 0.1-1.0 μ g/mL. The optimal antibody concentration should be determined empirically for each specific application.
Storage:	Store at 2-8°C for up to one month. For long term storage, apportion into working aliquots and store at -20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.
Recommended Positive Controls:	HeLa cells; Jurkat cells.

This product is for research use only. Not for use in diagnostic procedures.

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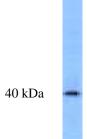
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References:	Kovacina, K.S., et al. (2003) Identification of a proline-rich Akt substrate as a 14-3-3 binding partner. J. Biol. Chem. 278:10189-10194.
	Cantley, L.C. (2002) The phosphoinositide 3-kinase pathway. Science 296(5573):1655-1657.
	Lizcano, J.M. and D.R. Alessi (2002) The insulin signaling pathway. Curr. Biol. 12(7):R236-R238.
	Cho, H., et al. (2001) Akt1/PKBalpha is required for normal growth but dispensable for maintenance of glucose homeostasis in mice. J. Biol. Chem. 276(42):38349-38352.
Related Products:	Antibodies:
	AKT/PKB [pS473], Cat. # 44-621G
	PRAS40 [pT246] antibody. Cat. # 44-1100G
	Assays:
	AKT (total) ELISA kit, Cat. # KHO0101
	AKT [pS473] ELISA kit, Cat. # KHO0111
	AKT [pT308] ELISA kit, Cat. # KHO0201
	PRAS40 (total) ELISA kit, Cat. # KHO0411
	PRAS40 [pT246] ELISA kit, Cat. # KHO0421
	Inhibitors:
	PI3K inhibitor LY294002, Cat. # PHZ1144



Extract prepared from human HeLa cells was resolved by SDS-PAGE on a 4-20% polyacrylamide gel and transferred to PVDF. The membrane was blocked with a 5% milk-TBST buffer and then incubated with this PRAS40 monoclonal antibody (clone 73P21) at a concentration of 0.50 μ g/mL in a 5% milk-TBST buffer for two hours at room temperature. After washing, the membrane was incubated with goat F(ab')₂ anti-mouse IgG alkaline phosphatase (Cat. # AMI4405) and the signal was detected using the Tropix WesternStarTM method.

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