



TBC1D4 (phospho Thr642) Polyclonal Antibody

Cat #: ABP57120

Size: 30µl /100µl /200µl

Product Information

	Product Name: TBC1D4 (phospho Thr642) Polyclonal Antibody		
	Applications: WB, IHC-P, IF, ELISA		Isotype: Rabbit IgG
	Reactivity: Human, Mouse		
REF	Catalog Number: ABP57120	LOT	Lot Number: Refer to product label
	Formulation: Liquid		Concentration: 1 mg/ml
	Storage: Store at -20°C. Avoid repeated freeze / thaw cycles.		Note: Contain sodium azide.

Background: TBC1D4 (TBC1 domain family member 4) is a member of the Tre-2/BUB2/CDC16 domain family. The protein encoded by TBC1D4 is a Rab-GTPase-activating protein, and contains two phosphotyrosine-binding domains (PTB1 and PTB2), a calmodulin-binding domain (CBD), a Rab-GTPase domain, and multiple AKT phosphomotifs. This protein is thought to play an important role in glucose homeostasis by regulating the insulin-dependent trafficking of the glucose transporter 4 (GLUT4), important for removing glucose from the bloodstream into skeletal muscle and fat tissues. Reduced expression of this gene results in an increase in GLUT4 levels at the plasma membrane, suggesting that this protein is important in intracellular retention of GLUT4 under basal conditions. When exposed to insulin, this protein is phosphorylated, dissociates from GLUT4 vesicles, resulting in increased GLUT4 at the cell surface, and enhanced glucose transport. Phosphorylation of this protein by AKT is required for proper translocation of GLUT4 to the cell surface. Individuals homozygous for a mutation in this gene are at higher risk for type 2 diabetes and have higher levels of circulating glucose and insulin levels after glucose ingestion. Alternative splicing results in multiple transcript variants encoding different isoforms.

Application Notes: Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: IHC-P (1:100-1:300), IF (1:200-1:1000), ELISA (1:5000). Not yet tested in other applications.

Storage Buffer: PBS containing 50% Glycerol, 0.5% BSA and 0.02% Sodium Azide.

Storage Instructions: Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

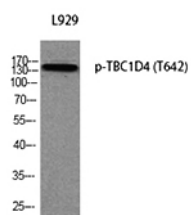


Fig. Western blot analysis of L929 using p-TBC1D4 (T642) antibody. Antibody was diluted at 1:2000.

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