

TBC1D4 Rabbit pAb

Catalog No.: A18216

Basic Information

Observed MW

160kDa

Calculated MW

147kDa

Category

Primary antibody

Applications

ELISA,WB,IF/ICC

Cross-Reactivity

Mouse, Rat

Background

This gene is a member of the Tre-2/BUB2/CDC16 domain family. The protein encoded by this gene 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.

Recommended Dilutions

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID	Swiss Prot
9882	O60343

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1059-1298 of human TBC1D4 (NP_055647.2).

Synonyms

AS160; NIDDM5; TBC1D4

Contact

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Product Information

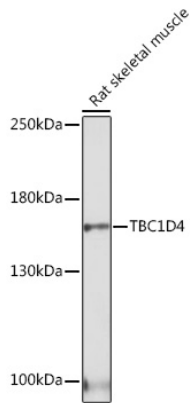
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of lysates from Rat skeletal muscle, using TBC1D4 Rabbit pAb (A18216) at 1:1000 dilution.

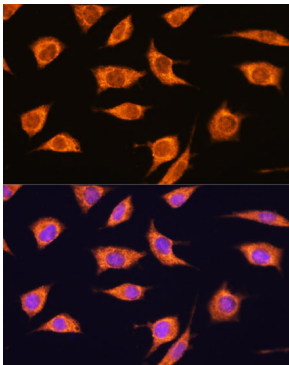
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Immunofluorescence analysis of L929 cells using TBC1D4 Rabbit pAb (A18216) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.