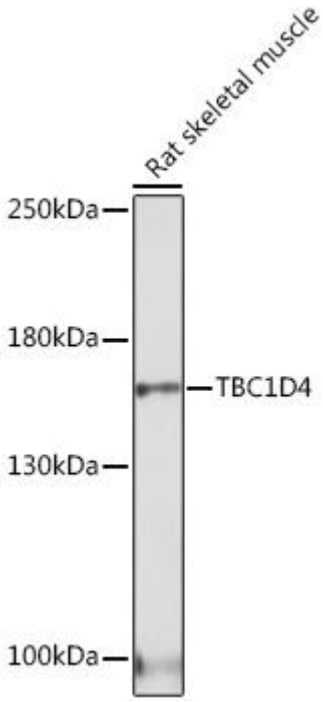
TBC1D4 Mouse mAb

Catalog No	YP-mAb-04238
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	
Protein Name	
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1059-1298 of human TBC1D4 (NP_055647.2).
Specificity	
Formulation	
Source	
Purification	Affinity purification
Dilution	WB 1:500 - 1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AS160; NIDDM5; TBC1D4
Observed Band	160kDa
Cell Pathway	
Tissue Specificity	
Function	
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 phopshotyrosine-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
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from Rat skeletal muscle, using TBC1D4 Mouse pAb (A18216) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s