

## Product datasheet for **TA382332S**

### TBC1D4 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB,1:500 - 1:2000
Reactivity:	Human, Mouse
Modifications:	Phospho T642
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic phosphorylated peptide around T642 of human TBC1D4 (NP_055647.2).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	53kDa/60kDa/139kDa/145kDa/146kDa
Gene Name:	TBC1 domain family member 4
Database Link:	<a href="#">Entrez Gene 9882 Human</a> <a href="#">O60343</a>



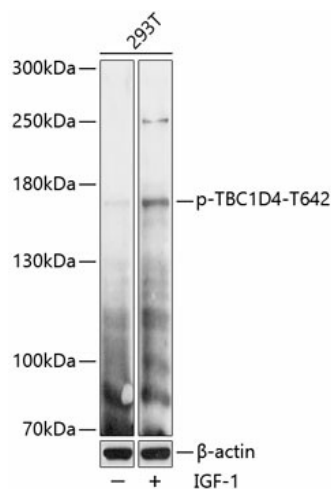
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**Background:**

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.

**Synonyms:**

5930406J04Rik; A930035N22; As160; AV295684

**Product images:**

Western blot analysis of extracts of 293T cells, using Phospho-TBC1D4-T642 antibody ([TA382332]) at 1:2000 dilution. 293T cells were treated by IGF-1 (50ng/mL) for 5 minutes after serum-starvation overnight. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% BSA. | Detection: ECL Enhanced Kit. | Exposure time: 30s.