# Anti-Phospho-AS160 (Thr642) Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P108970

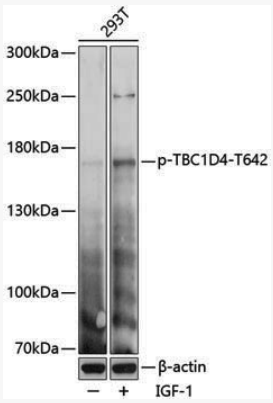
## Product Information

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| Application | WB, ELISA |
| Reactivity | Human, Mouse |
| Dilution | WB 1:500~1:2000 |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthetic phosphorylated peptide around T642 of human TBC1D4 (NP_055647.2). |
| Format | Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-Phospho-AS160 (Thr642) Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| Synonyms | AS160; NIDDM5; Phospho-TBC1D4-T642. |
| Calculated MW | Calculated MW: 147 kDa; Observed MW: 160 kDa |
| Uniprot ID | O60343 |
| Gene ID | 9882 |
| 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. |

## Validation Images




Western blot analysis of lysates from 293T cells, using Phospho-TBC1D4-T642 Rabbit pAb (P108970) at 1:2,000 dilution. 293T cells were treated by IGF-1 (50ng/mL) for 5 minutes after serum-starvation overnight.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25μg per lane.
Blocking buffer: 3% BSA.
Detection: ECL Enhanced Kit.
Exposure time: 30s.