Anti-Phospho-AS160 (Ser588) Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P108912

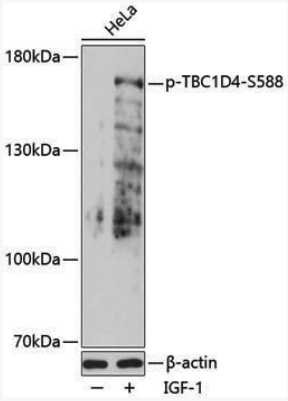
Product Information

Application	WB, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:2,000
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic phosphorylated peptide around S588 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 (Ser588) Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	AS160; NIDDM5; Phospho-TBC1D4-S588.
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 HeLa cells, using Phospho-TBC1D4-S588 Rabbit pAb (P108912) at 1:2,000 dilution. HeLa cells were treated by IGF-1 (50ng/mL) for 30 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 Kit.
Exposure time: 30s.