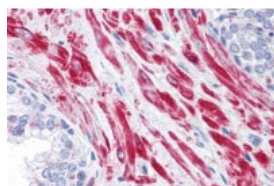




TBC1D4 Antibody

CATALOG NUMBER: 4415



Immunohistochemistry of TBC1D4 in human prostate tissue with TBC1D4 antibody at 10 ug/mL.

Specifications

SPECIES REACTIVITY:	Human
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Mouse: (89%)
TESTED APPLICATIONS:	ELISA, IHC-P
APPLICATIONS:	TBC1D4 antibody can be used for immunohistochemistry starting at 10 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
PREDICTED MOLECULAR WEIGHT:	Predicted: 143 kDa Observed: 140 kDa
IMMUNOGEN:	TBC1D4 antibody was raised against an 19 amino acid peptide near the carboxy terminus of human TBC1D4 . The immunogen is located within amino acids 1190 - 1240 of TBC1D4.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	TBC1D4 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	TBC1D4 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	TBC1D4 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	TBC1D4 Antibody: AS160, AS160, KIAA0603, TBC1 domain family member 4, Akt substrate of 160 kDa
ACCESSION NO.:	NP_055647

PROTEIN GI NO.: 114688046

OFFICIAL SYMBOL: TBC1D4

GENE ID: 9882

Background

BACKGROUND: TBC1D4 Antibody: TBC1D4, also known as the Akt substrate AS160, was initially identified as an Akt substrate containing a GTPase-activating domain that regulates GLUT4 trafficking, with activation following insulin stimulation. TBC1D4 truncations in humans is a major cause of dominant inherited insulin resistance. The loss of TBC1D4 results in the accumulation of GLUT4 in compartments that are primed for fusion in basal adipocytes.

- REFERENCES:**
- 1) Kane S, Sano H, Liu SCH, et al. Akt phosphorylates a novel adipocyte protein with a Rab GTPase-activating protein (GAP) domain. J. Biol. Chem. 2002; 277:22115-8.
 - 2) Sano H, Kane S, Sano E, et al. Insulin-stimulated phosphorylation of a Rab GTPase-activating protein regulates GLUT4 translocation. J. Biol. Chem. 2003; 278:14599-602.
 - 3) Dash S, Sano H, Rochford JJ, et al. A truncation mutation in TBC1D4 in a family with acanthosis nigricans and postprandial hyperinsulinemia. Proc. Natl. Acad. Sci. U.S.A. 2009; 106:9350-5.
 - 4) Brewer PD, Romenskaia I, Kanow MA, et al. Loss of AS160 Akt substrate causes Glut4 protein to accumulate in compartments that are primed for fusion in basal adipocytes. J. Biol. Chem. 2011; 286:26287-97.

FOR RESEARCH USE ONLY

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