

Goat Anti-AS160 / TBC1D4 Antibody

Peptide-affinity purified goat antibody Catalog # AF1117a

Specification

Goat Anti-AS160 / TBC1D4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>O60343</u> NP_055647, <u>9882</u> Human Dog Goat Polyclonal 100ug/200ul IgG 146563

Goat Anti-AS160 / TBC1D4 Antibody - Additional Information

Gene ID 9882

Other Names TBC1 domain family member 4, Akt substrate of 160 kDa, AS160, TBC1D4, AS160, KIAA0603

Dilution WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat Anti-AS160 / TBC1D4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-AS160 / TBC1D4 Antibody - Protein Information

Name TBC1D4

Synonyms AS160, KIAA0603



Function

May act as a GTPase-activating protein for RAB2A, RAB8A, RAB10 and RAB14. Isoform 2 promotes insulin-induced glucose transporter SLC2A4/GLUT4 translocation at the plasma membrane, thus increasing glucose uptake.

Cellular Location

Cytoplasm. Note=Isoform 2 shows a cytoplasmic perinuclear localization in a myoblastic cell line in resting and insulin-stimulated cells

Tissue Location

Widely expressed. Isoform 2 is the highest overexpressed in most tissues. Isoform 1 is highly expressed in skeletal muscle and heart, but was not detectable in the liver nor in adipose tissue. Isoform 2 is strongly expressed in adrenal and thyroid gland, and also in lung, kidney, colon, brain and adipose tissue Isoform 2 is moderately expressed in skeletal muscle. Expressed in pancreatic Langerhans islets, including beta cells (at protein level) Expression is decreased by twofold in pancreatic islets in type 2 diabetes patients compared to control subjects. Up-regulated in T-cells from patients with atopic dermatitis.

Goat Anti-AS160 / TBC1D4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-AS160 / TBC1D4 Antibody - Images



AF1117a (0.1 μ g/ml) staining of Daudi cell lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1117a (3.8 μ g/ml) staining of paraffin embedded Human Skeletal Muscle. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-AS160 / TBC1D4 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Identification of a novel phosphorylation site on TBC1D4 regulated by AMP-activated protein kinase in skeletal muscle. Treebak JT, et al. Am J Physiol Cell Physiol, 2010 Feb. PMID 19923418.

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hyperinsulinemia. Dash S, et al. Proc Natl Acad Sci U S A, 2009 Jun 9. PMID 19470471.

Potential role of TBC1D4 in enhanced post-exercise insulin action in human skeletal muscle. Treebak JT, et al. Diabetologia, 2009 May. PMID 19252894.

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