

TBC1D1 (CT) antibody (pAb)

Rabbit Anti-Human TBC1D1 (CT)

Instruction Manual

Catalog Number	PK-AB718-4231
Synonyms	TBC1D1 Antibody: TBC1 domain family member 1, TBC, TBC1
Description	TBC1D1 is the founding member of a family of proteins sharing a 180- to 200-amino acid TBC domain and presumed to have a role in regulating cell growth and differentiation. These proteins share significant homology with TRE2/USP6, yeast Bub2, and CDC16. TBC1D1 and TBC1D4 (AS160) have been demonstrated to be Rab GAPs (GTPase-activating proteins) that link upstream to Akt and phosphoinositide 3-kinase and downstream to Rabs involved in trafficking of GLUT4 vesicles. TBC1D1 regulates insulin-mediated GLUT4 translocation through its GAP activity, and is a likely Akt substrate. Mutations in the Tbc1d1 gene lead to some cases of severe human obesity.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	TBC1D1 antibody was raised in rabbits against a 22 amino acid peptide from near the carboxy terminus of human TBC1D1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. TBC1D1 antibody can be used for detection of TBC1D1 by Western blot at 1 - 4 µg/mL.
Images	Available upon request.
References	White RA, Pasztor LM, Richardson PM, et al. The gene encoding TBC1D1 with homology to the tre-2/USP6 oncogene, Bub2, and cdc16 maps to mouse chromosome 5 and human chromosome 4. Cytogenet. Cell Genet. 2000; 89:272-5. Koumanov F and Holman GD. Thrifty Tbc1d1 and Tbc1d4 proteins link signalling and membrane trafficking pathways. Biochem. J. 2007; 403:e9-11. Roach WG, Chavez JA, Miinea CP, et al. Substrate specificity and effect on GLUT4 translocation of the Rab GTPase-activating protein Tbc1d1. Biochem J. 2007; 403:353-8. Stone S, Abkevich V, Russell DL, et al. TBC1D1 is a candidate for a severe obesity gene and evidence for a gene/gene interaction in obesity predisposition. Hum. Mol. Genet. 2006; 15:2709-20.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4231P; TBC1D1 Peptide Cat.No. PK-AB718-1224; Daudi Cell Lysate

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