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# TBC1D1 Antibody
**Catalog # ASC10543**

## Specification

### TBC1D1 Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | Q86TI0 |
| Other Accession | NP_055988, 50658061 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **IgG** |
| Application Notes | **TBC1D1 antibody can be used for detection of TBC1D1 by Western blot at 1 - 4 µg/mL.** |

### TBC1D1 Antibody - Additional Information

Gene ID **23216**

**Target/Specificity**
TBC1D1;

**Reconstitution & Storage**
TBC1D1 antibody can be stored at 4℃ for three months and -20℃, stable 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.

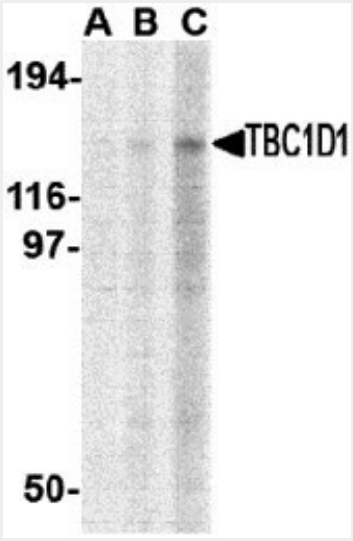
**Precautions**
TBC1D1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### TBC1D1 Antibody - Protein Information

**Name** TBC1D1

**Synonyms** KIAA1108

**Function**
May act as a GTPase-activating protein for Rab family protein(s). May play a role in the cell cycle and differentiation of various




Western blot analysis of TBC1D1 in Daudi cell lysate with TBC1D1 antibody at (A) 1, (B) 2 and (C) 4 µg/mL.

### TBC1D1 Antibody - Background

TBC1D1 Antibody: 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.

### TBC1D1 Antibody - 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

tissues. Involved in the trafficking and translocation of GLUT4-containing vesicles and insulin-stimulated glucose uptake into cells (By similarity).

**Cellular Location**
Nucleus.

## TBC1D1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.