

**TBC1D4 polyclonal antibody**

Catalog: BS61348

Host: Rabbit

Reactivity: Human

BackGround:

Insulin is a major hormone controlling critical energy functions, such as glucose and lipid metabolism. Insulin binds to and activates the insulin receptor (IR) tyrosine kinase, which phosphorylates and recruits adaptor proteins. The signaling pathway initiated by insulin and its receptor stimulates glucose uptake in muscle cells and adipocytes through translocation of the Glut4 glucose transporter from the cytoplasm to the plasma membrane. A 160 kDa substrate of the Akt Ser/Thr kinase (AS160, TBC1D4) is a Rab GTPase-activating protein that regulates insulin-stimulated Glut4 trafficking. AS160 is expressed in many tissues including brain, kidney, liver, and brown and white fat. Multiple Akt phosphorylation sites have been identified on AS160 in vivo, with five sites (Ser318, Ser570, Ser588, Thr642, and Thr751) showing increased phosphorylation following insulin treatment. Studies using recombinant AS160 demonstrate that insulin-stimulated phosphorylation of AS160 is a crucial step in Glut4 translocation and is reduced in some patients with type 2 diabetes. The interaction of 14-3-3 regulatory proteins with AS160 phosphorylated at Thr642 is a necessary step for Glut4 translocation. Phosphorylation of AS160 by AMPK is involved in the regulation of contraction-stimulated Glut4 translocation.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 180 kDa

Swiss-Prot:

O60343

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000

Storage&Stability:

Store at 4 °C short term. Aliquot and store at -22 °C long term. Avoid freeze-thaw cycles.

Specificity:

TBC1D4 polyclonal antibody detects endogenous levels of TBC1D4 protein.

DATA:

Western blot (WB) analysis of TBC1D4 polyclonal antibody at 1:500 dilution

Lane1:HEK293T whole cell lysate(40 µg)

Lane2:HepG2 whole cell lysate(40 µg)

Lane3:Myla2059 whole cell lysate(40 µg)

Lane4:HUT78 whole cell lysate(40 µg)

Lane5:U-87MG whole cell lysate(40 µg)

Note:

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: info@bioworld.com

Tel: 6123263284

Fax: 6122933841

Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: info@biogot.com

Tel: 0086-025-68037686

Fax: 0086-025-68035151