

PRODUCT DATA SHEET

Bioworld Technology, Inc.

CREB Regulated Transcription Coactivator 2 monoclonal antibody

Catalog: MB12280 Host: Rabbit Reactivity: Human

BackGround:

Glucose homeostasis is regulated by hormones and cellular energy status. Elevations of blood glucose during feeding stimulate insulin release from pancreatic β-cells through a glucose sensing pathway. Feeding also stimulates release of gut hormones such as glucagon-like peptide-1 (GLP-1), which further induces insulin release, inhibits glucagon release and promotes β-cell viability. CREB-dependent transcription likely plays a role in both glucose sensing and GLP-1 signaling. The protein Torc2 (transducer of regulated CREB activity 2) functions as a CREB co-activator and is implicated in mediating the effects of these two pathways. In quiescent cells, Torc2 is phosphorylated at Ser171 and becomes sequestered in the cytoplasm via an interaction with 14-3-3 proteins. Glucose and gut hormones lead to the dephosphorylation of Torc2 and its dissociation from 14-3-3 proteins. Dephosphorylated Torc2 enters the nucleus to promote CREB-dependent transcription. Torc2 plays a key role in the regulation of hepatic gluconeogenic gene transcription in response to hormonal and energy signals during fasting. Tissue specificity: Most abundantly expressed in the thymus. Present in both B and T lymphocytes. Highly expressed in HEK293T cells and in insulinomas. High levels also in spleen, ovary, muscle and lung, with highest levels in muscle. Lower levels found in brain, colon, heart, kidney, prostate, small intestine and stomach. Weak expression in liver and pancreas.

Product:

50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

Molecular Weight:

Calculated MW: 73 kDa; Observed MW: 80 kDa

Swiss-Prot:

O53ET0

Purification&Purity:

Affinity Purified

Applications:

WB: 1/500-1/1000

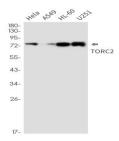
Storage&Stability:

Store at $4 \,\mathrm{C}$ short term. Aliquot and store at $-20 \,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

Isotype:

IgG

DATA:



Western blot analysis of TORC2 in Hela, A549, HL-60, U251 lysates using CREB Regulated Transcription Coactivator 2 antibody.

Note:

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

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