

Anti-TORC2 Antibody

Catalog # ABO11296

Product Information

Application	WB
Primary Accession	Q53ET0
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for CREB-regulated transcription coactivator 2(CRTC2) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	200186
Other Names	CREB-regulated transcription coactivator 2, Transducer of regulated cAMP response element-binding protein 2, TORC-2, Transducer of CREB protein 2, CRTC2, TORC2
Calculated MW	73302
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cytoplasm. Nucleus. Translocated from the nucleus to the cytoplasm on interaction of the phosphorylated form with 14-3-3 protein. In response to cAMP levels and glucagon, relocated to the nucleus.
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. .
Source	Eukaryota
Protein Name	CREB-regulated transcription coactivator 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TORC2(595-611aa QDPHTFNHQNLTHCSRH), different from the related rat sequence by three amino acids, and from the related mouse sequence by two

	amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the TORC family.

Protein Information

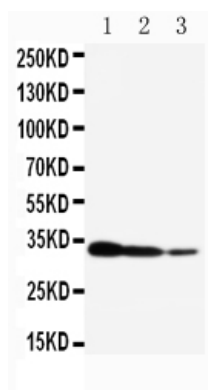
Name	CRTC2
Synonyms	TORC2
Function	Transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. Acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. Enhances the interaction of CREB1 with TAF4. Regulates gluconeogenesis as a component of the LKB1/AMPK/TORC2 signaling pathway. Regulates the expression of specific genes such as the steroidogenic gene, StAR. Potent coactivator of PPARGC1A and inducer of mitochondrial biogenesis in muscle cells. Also coactivator for TAX activation of the human T-cell leukemia virus type 1 (HTLV-1) long terminal repeats (LTR).
Cellular Location	Cytoplasm. Nucleus. Note=Translocated from the nucleus to the cytoplasm on interaction of the phosphorylated form with 14-3-3 protein (PubMed:15454081). In response to cAMP levels and glucagon, relocated to the nucleus (PubMed:15454081)
Tissue Location	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.

Background

CRTC2(CREB-Regulated Transcription Coactivator 2), also known as TORC2, is a protein that in humans is encoded by the CRTC2 gene. The International Radiation Hybrid Mapping Consortium mapped the CRTC2 gene to chromosome 1. By cotransfection of TORC2 and reporter genes in HeLa cells, Iourgenko et al.(2003) found that TORC2 potently activated expression of genes driven by the IL8 promoter or a promoter carrying multiple CRE-like sequences. Liu et al.(2008) demonstrated that a fasting-inducible switch, consisting of the histone acetyltransferase p300 and the nutrient-sensing deacetylase sirtuin-1(SIRT1), maintains energy balance in mice through the sequential induction of CRTC2 and FOXO1. Using mice and primary mouse hepatocytes, Wang et al.(2009) found that Crtc2 functioned as a dual sensor for endoplasmic reticulum(ER) stress and fasting signals.

Images

Anti-TORC2 antibody, ABO11296, Western blotting
Recombinant Protein Detection Source: E.coli



derived -recombinant Human CRTC2, 29.3KD(162aa tag+ L585-Q693) Lane 1: Recombinant Human CRTC2 Protein 10ng Lane 2: Recombinant Human CRTC2 Protein 5ng Lane 3: Recombinant Human CRTC2 Protein 2.5ng

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.