
Product Name: CREB Regulated Transcription Coactivator 2 Rabbit Monoclonal Antibody
Catalog #: AMRe03235

For research use only.

Summary

Description	Recombinant rabbit monoclonal antibody
Host	Rabbit
Application	WB,IHC,IP
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	0.63mg/ml. The concentration of this product may be batch-dependent.
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% protective protein
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:1000,IHC 1:50-1:100,IP 1:20-1:50
Molecular Weight	Calculated MW: 73 kDa; Observed MW: 80 kDa

Antigen Information

Gene Name	CRTC2
Alternative Names	TORC2; TORC-2
Gene ID	200186
SwissProt ID	Q53ET0
Immunogen	Recombinant protein of human TORC2

Background

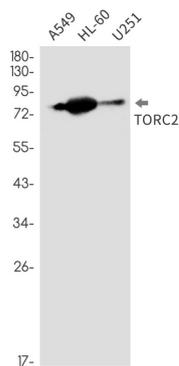
Glucose homeostasis is regulated by hormones and cellular energy status. Elevations of blood glucose during feeding stimulate insulin release from pancreatic β -cells through a glucose sensing pathway. Feeding also stimulates release of gut hormones

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 .

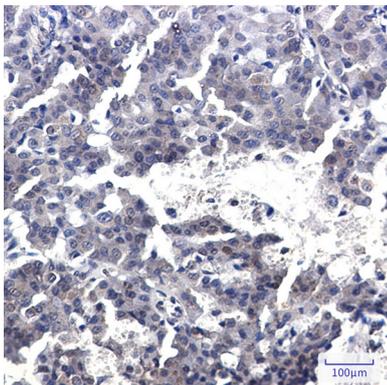
Research Area

Signal Transduction

Image Data



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



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using TORC2 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.