

For Research Use Only

TORC1/CRTC1 Polyclonal antibody

Catalog Number: 10441-1-AP

Featured Product

11 Publications



Basic Information

Catalog Number:

10441-1-AP

Size:

600 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0693

GenBank Accession Number:

BC028050

GeneID (NCBI):

23373

UNIPROT ID:

Q6UUV9

Full Name:

CREB regulated transcription coactivator 1

Calculated MW:

75 kDa

Observed MW:

68 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

WB, IP, IF, IHC

Species Specificity:

human, mouse

Cited Species:

human, rat, mouse

Positive Controls:

WB: mouse kidney tissue, A431 cells, Jurkat cells, L02 cells, mouse brain tissue

IP: mouse kidney tissue,

IHC: human colon cancer tissue, mouse brain tissue

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

CRTC1, also named as MECT1, TORC1, and WAMTP1, belongs to the TORC family. It is a transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. CRTC1 acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. It enhances the interaction of CREB1 with TAF4. CRTC1 regulates the expression of specific CREB-activated genes such as the steroidogenic gene, StAR. It is a potent coactivator of PGC1alpha and inducer of mitochondrial biogenesis in muscle cells. CRTC1 is also a coactivator for TAX activation of the human T-cell leukemia virus type 1 (HTLV-1) long terminal repeats (LTR). In the hippocampus, CRTC1 involved in late-phase long-term potentiation (L-LTP) maintenance at the Schaffer collateral-CA1 synapses. It may be required for dendritic growth of developing cortical neurons. This is a rabbit polyclonal antibody raised against residues near N terminus of human CRTC1. CRTC1 has some isoforms produced by alternative splicing with MW of 67 kDa, 68 kDa and 62 kDa. Sometimes it appears as a 75-80 kDa band probably due to phosphorylation (PMID: 17183642; 22770221)

Notable Publications

Author	Pubmed ID	Journal	Application
Toh Hean Ch'ng	26388727	Front Mol Neurosci	IF
Yiwen Lu	34616019	Nat Cell Biol	WB
Lei Wu	29116185	Sci Rep	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

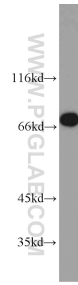
T: 4006900926

E: Proteintech-CN@ptglab.com

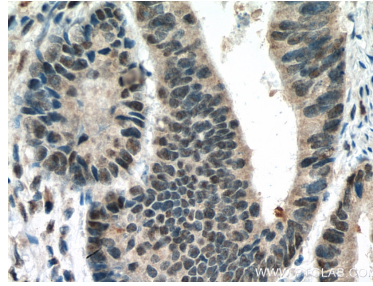
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

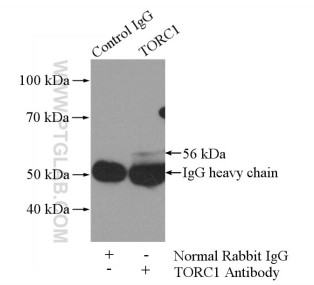
Selected Validation Data



mouse kidney tissue were subjected to SDS PAGE followed by western blot with 10441-1-AP (TORC1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10441-1-AP (TORC1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-TORC1/CRTC1 (IP:10441-1-AP, 4ug; Detection:10441-1-AP 1:800) with mouse kidney tissue lysate 4000ug.