

For Research Use Only

# TORC1/CRTC1 Polyclonal antibody

Catalog Number: 10441-1-AP

Featured Product

13 Publications



## Basic Information

### Catalog Number:

10441-1-AP

### Concentration:

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:

WB, IP, IHC, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat

### 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 WAMP1, 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 PGC1α 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

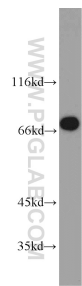
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

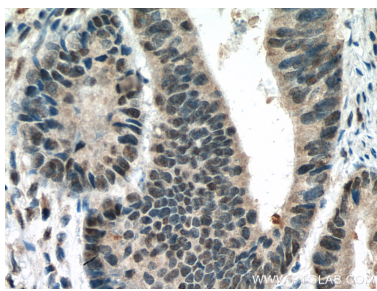
W: [ptgcn.com](http://ptgcn.com)

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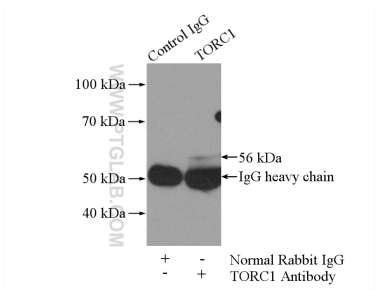
Selected Validation Data



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.