

## TORC1/CRTC1 Recombinant antibody

Catalog Number: 86226-3-RR

## Basic Information

|                                                                |                                                                 |                                                       |
|----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------|
| <b>Catalog Number:</b><br>86226-3-RR                           | <b>GenBank Accession Number:</b><br>BC028050                    | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ul , Concentration: 1000 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>23373                                  | <b>CloneNo.:</b><br>250870G10                         |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>Q6UUV9                                    | <b>Recommended Dilutions:</b><br>WB: 1:2000-1:10000   |
| <b>Isotype:</b><br>IgG                                         | <b>Full Name:</b><br>CREB regulated transcription coactivator 1 |                                                       |
| <b>Immunogen Catalog Number:</b><br>AG0693                     | <b>Calculated MW:</b><br>75 kDa                                 |                                                       |
|                                                                | <b>Observed MW:</b><br>68-80 kDa                                |                                                       |

## Applications

|                                          |                                                                                   |
|------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Tested Applications:</b><br>WB, ELISA | <b>Positive Controls:</b><br>WB : A431 cells, Jurkat cells, L02 cells, HeLa cells |
| <b>Species Specificity:</b><br>human     |                                                                                   |

## 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. 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)

## Storage

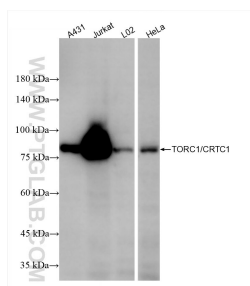
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

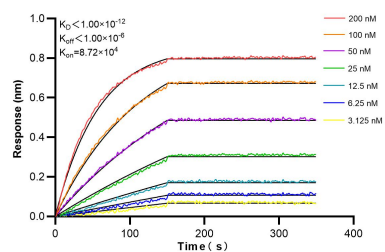
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 86226-3-RR (TORC1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 86226-3-RR against Human TORC1/CRTC1 were performed. The affinity constant is below 1 pM.