For Research Use Only

TORC1/CRTC1 Recombinant antibody

Catalog Number:86226-3-RR



Basic Information

Catalog Number:

 86226-3-RR
 BC028050

 Concentration:
 GeneID (NCBI):

 1000 μg/ml
 23373

 Source:
 UNIPROT ID:

 Rabbit
 Q6UUV9

 Isotype:
 Full Name:

gG CREB regulated transcription
coactivator 1

Immunogen Catalog Number: coactivator 1
AG0693 Calculated MW: 75 kDa

Observed MW: 68-80 kDa

GenBank Accession Number:

Applications

Tested Applications: WB, ELISA

Species Specificity:

human

Positive Controls:

WB: A431 cells, Jurkat cells, LO2 cells, HeLa cells

Purification Method:

Protein A purification

Recommended Dilutions:

WB: 1:2000-1:10000

CloneNo.:

250870G10

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:

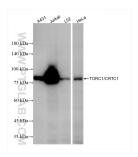
Store at -20°C. Stable for one year after shipment.

Storage Buffer

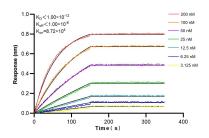
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



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



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