For Research Use Only

TORC1/CRTC1 Recombinant antibody, PBS Only

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Purification Method:

Protein A purification

CloneNo.:

250870G10

Catalog Number:86226-3-PBS

Basic Information

Catalog Number:

GenBank Accession Number: BC028050

86226-3-PBS

GeneID (NCBI):

100ug, Concentration: 1 mg/ml by

Nanodrop:

UNIPROT ID:

Rabbit

Q6UUV9 Full Name:

Isotype:

CREB regulated transcription

IgG

coactivator 1 Calculated MW:

Immunogen Catalog Number: AG0693

75 kDa Observed MW:

68-80 kDa

Applications

Tested Applications:

WB, Indirect ELISA **Species Specificity:**

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

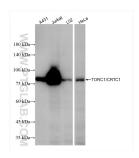
Storage:

Store at -80°C.

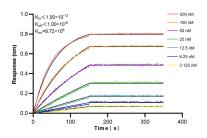
Storage Buffer:

PBS only, pH7.3

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. This data was developed using the same antibody clone with 86226-3-PBS in a different storage buffer formulation.



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