

CRTC1 / MECT1 / TORC1 Antibody (aa19-34)
Rabbit Polyclonal Antibody
Catalog # ALS11316**Specification**

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) - Product Information

Application	WB, IHC-P, E
Primary Accession	Q6UUV9
Reactivity	Human, Mouse, Rat, Zebrafish, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A E~~N/A

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) - Additional Information**Gene ID** 23373**Other Names**

CREB-regulated transcription coactivator 1, Mucoepidermoid carcinoma translocated protein 1, Transducer of regulated cAMP response element-binding protein 1, TORC-1, Transducer of CREB protein 1, CRTC1 (HGNC:16062)

Target/Specificity

Amino acids 19-34 of human MECT1 protein.

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) is for research use only and not for use in diagnostic or therapeutic procedures.

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) - Protein Information**Name** CRTC1 ([HGNC:16062](#))**Function**

Transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. Acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. Enhances the interaction of CREB1 with TAF4. Regulates the expression of specific CREB-activated genes such as the steroidogenic gene, StAR. Potent coactivator of PGC1alpha and inducer of mitochondrial biogenesis in muscle cells. In the hippocampus, involved

in late-phase long-term potentiation (L-LTP) maintenance at the Schaffer collateral-CA1 synapses. May be required for dendritic growth of developing cortical neurons (By similarity). In concert with SIK1, regulates the light-induced entrainment of the circadian clock. In response to light stimulus, coactivates the CREB-mediated transcription of PER1 which plays an important role in the photic entrainment of the circadian clock.

Cellular Location

Cytoplasm. Nucleus. Note=Cytoplasmic when phosphorylated by SIK or AMPK and when sequestered by 14-3-3 proteins (PubMed:16817901) Translocated to the nucleus on Ser-151 dephosphorylation, instigated by a number of factors including calcium ion and cAMP levels (PubMed:15589160). Light stimulation triggers a nuclear accumulation in the suprachiasmatic nucleus (SCN) of the brain (By similarity) {ECO:0000250|UniProtKB:Q68ED7, ECO:0000269|PubMed:15589160, ECO:0000269|PubMed:16817901}

Tissue Location

Highly expressed in adult and fetal brain. Located to specific regions such as the prefrontal cortex and cerebellum. Very low expression in other tissues such as heart, spleen, lung, skeletal muscle, salivary gland, ovary and kidney.

Volume

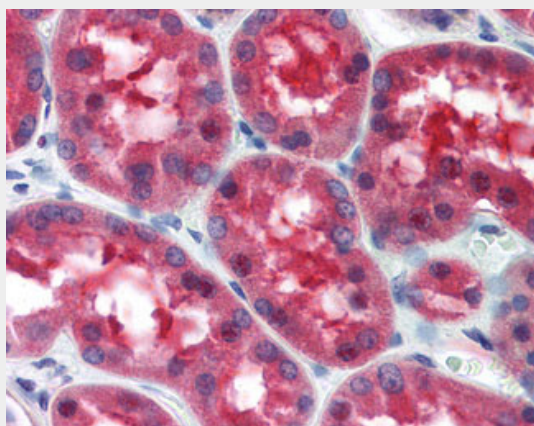
50 µl

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) - Images



Anti-CRTC1 / MECT1 antibody IHC of human kidney.

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) - Background

Transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. Acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. Enhances the interaction of CREB1 with TAF4. Regulates the expression of specific CREB-activated genes such as the steroidogenic gene, StAR. Potent coactivator of PGC1alpha and inducer of mitochondrial biogenesis in muscle cells. Also coactivator for TAX activation of the human T-cell leukemia virus type 1 (HTLV-1) long terminal repeats (LTR). In the hippocampus, involved in late-phase long- term potentiation (L-LTP) maintenance at the Schaffer collateral- CA1 synapses. May be required for dendritic growth of developing cortical neurons (By similarity). In concert with SIK1, regulates the light-induced entrainment of the circadian clock. In response to light stimulus, coactivates the CREB-mediated transcription of PER1 which plays an important role in the photic entrainment of the circadian clock.

CRTC1 / MECT1 / TORC1 Antibody (aa19-34) - References

Iourgenko V., et al. Proc. Natl. Acad. Sci. U.S.A. 100:12147-12152(2003).
Tonon G., et al. Nat. Genet. 33:208-213(2003).
Tonon G., et al. Nat. Genet. 33:408-408(2003).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Grimwood J., et al. Nature 428:529-535(2004).