

## **Anti-CRTC1 Antibody**



Model STJ117607

**Host** Rabbit

**Reactivity** Mouse, Rat

**Applications** WB

**Immunogen** Recombinant fusion protein containing a sequence corresponding to amino

acids 1-200 of human CRTC1 (NP\_056136.2).

**Gene ID** 23373

Gene Symbol CRTC1

**Dilution range** WB 1:200 - 1:2000

**Tissue Specificity** 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

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

Protein Name 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

Molecular Weight 67.3 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

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

**Storage Instruction** 

Store at -20C. Avoid freeze / thaw cycles.

**Database Links** 

HGNC:16062OMIM:607536Reactome:R-HSA-1368108

**Alternative 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

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, 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, 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 Localization** 

Cytoplasm,

Post-translational Modifications Phosphorylation/dephosphorylation states of Ser-151 are required for regulating transduction of CREB activity, TORCs are inactive when phosphorylated, and active when dephosphorylated at this site, This primary site of phosphorylation is mediated by SIKs (SIK1 and SIK2), is regulated by cAMP and calcium levels and is dependent on the phosphorylation of SIKs by LKB1,

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com