

# Product datasheet

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# ARG54064 anti-MECT1 / TORC1 antibody

Package: 100 μl Store at: -20°C

# **Summary**

Product Description Mouse Monoclonal antibody recognizes MECT1 / TORC1

Tested Reactivity Hu

Tested Application FACS, ICC/IF, IP, WB

Host Mouse

**Clonality** Monoclonal

Isotype IgG2b

Target Name MECT1 / TORC1

Species Human

Immunogen Purified recombinant human MECT1 / Torc1 protein fragments expressed in E.coli.

Conjugation Un-conjugated

Alternate Names CREB-regulated transcription coactivator 1; MECT1; WAMTP1; Transducer of CREB protein 1; TORC1;

Mucoepidermoid carcinoma translocated protein 1; Transducer of regulated cAMP response element-

binding protein 1; TORC-1

# **Application Instructions**

Application table	Application	Dilution
	FACS	1:100
	ICC/IF	1:300
	IP	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	78 kDa	

## **Properties**

Form Liquid

Purification Affinity purified

Buffer 0.1M Tris-Glycine (pH 7.4), 150 mM NaCl, 0.2% Sodium azide and 50% Glycerol

Preservative 0.2% Sodium azide

Stabilizer 50% Glycerol

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Database links <u>GeneID: 23373 Human</u>

Swiss-port # Q6UUV9 Human

Gene Symbol CRTC1

Gene Full Name CREB regulated transcription coactivator 1

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 (By similarity)

**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 (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.

[UniProt]

Research Area Gene Regulation antibody; Metabolism antibody; Signaling Transduction antibody

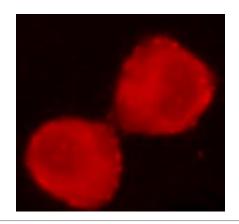
Calculated Mw 67 kDa

PTM 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

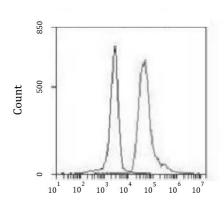
levels and is dependent on the phosphorylation of SIKs by LKB1 (By similarity).

Cellular Localization Cytoplasm. Nucleus



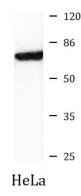
#### ARG54064 anti-MECT1 / TORC1 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG54064 anti-MECT1 / TORC1 antibody at 1:300 dilution.



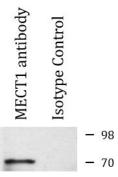
#### ARG54064 anti-MECT1 / TORC1 antibody FACS image

Flow Cytometry: K562 cells stained with ARG54064 anti-MECT1 / TORC1 antibody at 1:100 dilution (right) or isotype control antibody (left), followed by incubation with FITC labelled secondary antibody.



#### ARG54064 anti-MECT1 / TORC1 antibody WB image

Western blot: HeLa cell lysate stained with ARG54064 anti-MECT1 / TORC1 antibody at 1:1000 dilution.



#### ARG54064 anti-MECT1 / TORC1 antibody IP image

Immunoprecipitation: HeLa cell lysates were immunoprecipitated and stained with ARG54064 anti-MECT1 / TORC1 antibody.