

ARG42969 anti-MECT1 / TORC1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MECT1 / TORC1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MECT1 / TORC1
Species	Human
Immunogen	Recombinant protein corresponding to E30-E568 of Human MECT1 / TORC1.
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	1:150 - 1:500
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 80 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 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 or below. Storage in frost free freezers is not recommended. Avoid repeated

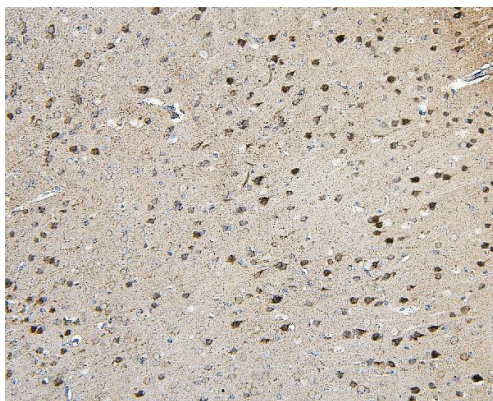
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

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

Bioinformation

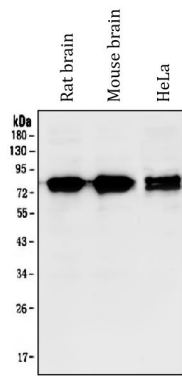
Gene Symbol	CRTC1
Gene Full Name	CREB regulated transcription coactivator 1
Function	<p>Transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. Acts as a coactivator, in the SIK/TORC signaling pathway, being active when 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.</p> <p>(Microbial infection) Plays a role of coactivator for TAX activation of the human T-cell leukemia virus type 1 (HTLV-1) long terminal repeats (LTR). [UniProt]</p>
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). [UniProt]
Cellular Localization	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). [UniProt]

Images



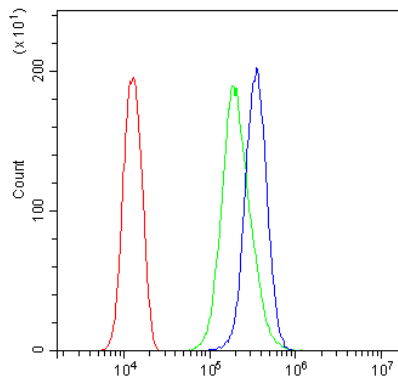
ARG42969 anti-MECT1 / TORC1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42969 anti-MECT1 / TORC1 antibody at 1 µg/ml dilution, overnight at 4°C.



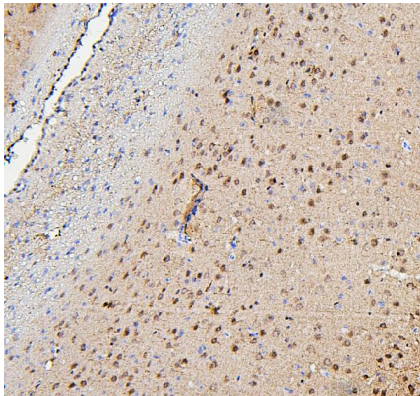
ARG42969 anti-MECT1 / TORC1 antibody WB image

Western blot: 50 µg of sample under reducing conditions. Rat brain, Mouse brain and HeLa whole cell lysates stained with ARG42969 anti-MECT1 / TORC1 antibody at 0.5 µg/ml dilution, overnight at 4°C.



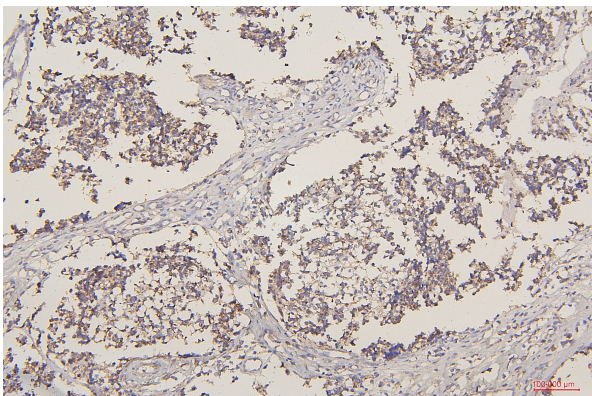
ARG42969 anti-MECT1 / TORC1 antibody FACS image

Flow Cytometry: U2OS cells were blocked with 10% normal goat serum and then stained with ARG42969 anti-MECT1 / TORC1 antibody (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight[®]488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



ARG42969 anti-MECT1 / TORC1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42969 anti-MECT1 / TORC1 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG42969 anti-MECT1 / TORC1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human glioma tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42969 anti-MECT1 / TORC1 antibody at 1 µg/ml dilution, overnight at 4°C.