

Rabbit TORC1/CRTC1 Polyclonal Antibody | anti-CRTC1 antibody

Anti-TORC1/CRTC1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19251	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

TORC1/CRTC1; Polyclonal Antibody; Anti-TORC1/CRTC1 Antibody; CRTC1; KIAA0616; MECT1; TORC1; WAMTP1; 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; CREB regulated transcription coactivator 1; anti-CRTC1 antibody

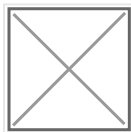
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for TORC1/CRTC1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-CRTC1 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Application Notes	WB: 0.1-0.25ug/ml Human, Mouse, Rat IHC-P: 2-5ug/ml Human, Mouse, Rat ICC/IF: 5ug/ml Human FC/FACS/FCM: 1-3ug/1x106 cells Human, Rat
Immunogen	A synthetic peptide corresponding to a sequence of human TORC1/CRTC1 (DAYYEQQMAARQANALSHQLEQFNMMENAIIS).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



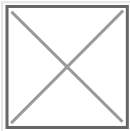
FCM (Flow Cytometry)

Figure 8. Flow Cytometry analysis of RH35 cells using anti-TORC1/CRTC1 antibody (AAA19251). Overlay histogram showing RH35 cells stained with AAA19251 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TORC1/CRTC1 Antibody (AAA19251, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



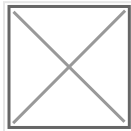
FCM (Flow Cytometry)

Figure 7. Flow Cytometry analysis of A431 cells using anti-TORC1/CRTC1 antibody (AAA19251). Overlay histogram showing A431 cells stained with AAA19251 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TORC1/CRTC1 Antibody (AAA19251, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 6. IF analysis of TORC1/CRTC1 using anti-TORC1/CRTC1 antibody (AAA19251). TORC1/CRTC1 was detected in immunocytochemical section of MCF-7 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti-TORC1/CRTC1 Antibody (AAA19251) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 5. IHC analysis of TORC1/CRTC1 using anti-TORC1/CRTC1 antibody (AAA19251). TORC1/CRTC1 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/mL rabbit anti-TORC1/CRTC1 Antibody (AAA19251) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 4. IHC analysis of TORC1/CRTC1 using anti-TORC1/CRTC1 antibody (AAA19251). TORC1/CRTC1 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/mL rabbit anti-TORC1/CRTC1 Antibody (AAA19251) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 3. IHC analysis of TORC1/CRTC1 using anti-TORC1/CRTC1 antibody (AAA19251). TORC1/CRTC1 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/mL rabbit anti-TORC1/CRTC1 Antibody (AAA19251) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).

ADDITIONAL INFORMATION

Related Product Information for anti-CRTC1 antibody	CRTC1 (CREB-Regulated Transcription Coactivator 1), also known as MECT1, TORC1 or KIAA0616, is a protein that in humans is encoded by the CRTC1 gene. By sequence analysis, Tonon et al. (2003) mapped the CRTC1 gene to chromosome 19p13. Kovacs et al. (2007) found that Torc1 was expressed in adult mouse brain and cultured neurons, and that it translocated to the nucleus upon concomitant activation of calcium and cAMP signaling pathways. Mair et al. (2011) demonstrated that CRTC1 is a direct AMPK target, and interacts with the CREB homolog-1 (CRH1) transcription factor in vivo. The prolongevity effects of activating AMPK or deactivating calcineurin decrease CRTC1 and CRH1 activity and induce transcriptional responses similar to those of CRH1-null worms.
References	1. Kovacs, K. A. Steullet, P., Steinmann, M., Do, K. Q., Magistretti, P. J., Halfon, O., Cardinaux, J. -R. TORC1 is a calcium- and cAMP-sensitive coincidence detector involved in hippocampal long-term synaptic plasticity. Proc. Nat. Acad. Sci. 104: 4700-4705, 2007. 2. Mair, W., Morantte, I., Rodrigues, A. P. C., Manning, G., Montminy, M., Shaw, R. J., Dillin, A. Lifespan extension induced by AMPK and calcineurin is mediated by CRTC-1 and CREB. Nature 470: 404-408, 2011. 3. Tonon, G., Modi, S., Wu, L., Kubo, A., Coxon, A. B., Komiya, T., O'Neil, K., Stover, K., El-Nagggar, A., Griffin, J. D., Kirsch, I. R., Kaye, F. J. t(11;19)(q21;p13) translocation in mucoepidermoid carcinoma creates a novel fusion product that disrupts a Notch signaling pathway. Nature Genet. 33: 208-213, 2003. Note: Erratum: Nature Genet. 33: 430 only, 2003.

NCBI AND UNIPROT INFORMATION

NCBI GI #	68565585
NCBI GeneID	23373
UniProt Accession #	Q6UUV9; O75114; Q6Y3A3; Q7LDZ2; Q8IUL3; Q8IZ34; Q8IZL1; Q8N6W3; Q96AI8; Q9H801; A6NMG5
Molecular Weight	62,530 Da
NCBI Official Full Name	CREB-regulated transcription coactivator 1
NCBI Official Synonym Full Names	CREB regulated transcription coactivator 1
NCBI Official Symbol	CRTC1
NCBI Official Synonym Symbols	MECT1; TORC1; TORC-1; WAMTP1
NCBI Protein Information	CREB-regulated transcription coactivator 1; CRTC1 {ECO:0000312 HGNC:HGNC:16062}; mucoepidermoid carcinoma translocated protein 1; transducer of regulated cAMP response element-binding protein (CREB) 1
UniProt Protein Name	CREB-regulated transcription coactivator 1
UniProt Gene Name	CRTC1
UniProt Synonym Gene Names	TORC-1; Transducer of CREB protein 1
UniProt Entry Name	CRTC1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/torc1-crtc1-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19251>