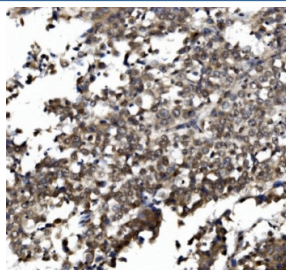


TORC1/CRTC1 Antibody (RQ6316)

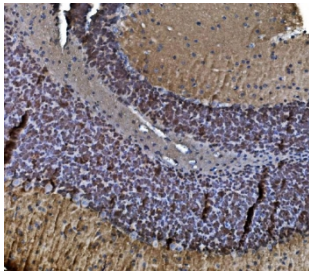
Catalog No.	Formulation	Size
RQ6316	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

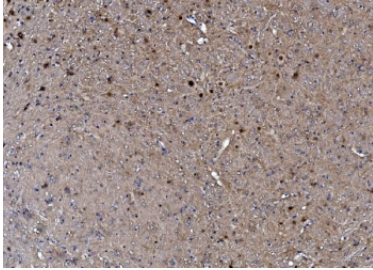
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q6UUV9
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence (FFPE) : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This TORC1/CRTC1 antibody is available for research use only.



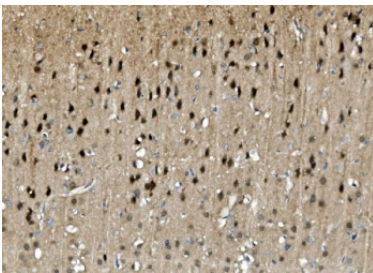
IHC staining of FFPE human lung cancer with TORC1/CRTC1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



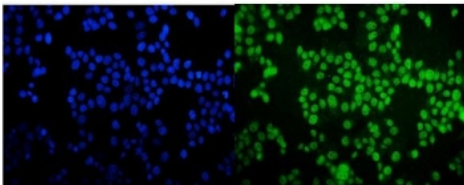
IHC staining of FFPE mouse brain with TORC1/CRTC1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



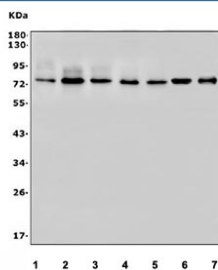
IHC staining of FFPE mouse brain with TORC1/CRTC1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



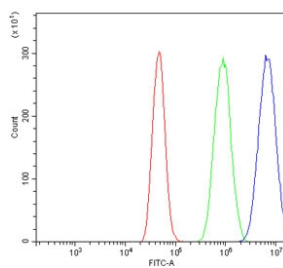
IHC staining of FFPE rat brain with TORC1/CRTC1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



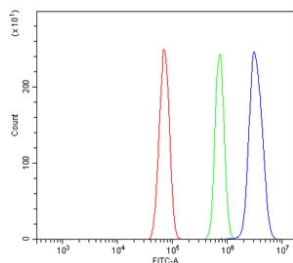
Immunofluorescent staining of FFPE human MCF7 cells with TORC1/CRTC1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) HEK293, 3) PC-3, 4) HepG2, 5) U-2 OS, 6) rat brain and 7) mouse brain lysate with TORC1/CRTC1 antibody. Predicted molecular weight ~67 kDa, routinely observed at 67-82 kDa.



Flow cytometry testing of human A431 cells with TORC1/CRTC1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= TORC1/CRTC1 antibody.



Flow cytometry testing of rat RH35 cells with TORC1/CRTC1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= TORC1/CRTC1 antibody.

Description

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.

Application Notes

Optimal dilution of the TORC1/CRTC1 antibody should be determined by the researcher.

Immunogen

Amino acids DAYYEQQMAARQANALSHQLEQFNMMENAIIS were used as the immunogen for the TORC1/CRTC1 antibody.

Storage

After reconstitution, the TORC1/CRTC1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.