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CCT2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1624a

Product Information

Application	WB, FC, ICC, E
Primary Accession	P78371
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	5B5C4
Isotype	IgG1
Calculated MW	57488
Description	The protein encoded by this gene is a molecular chaperone that is a member of the chaperonin containing TCP1 complex (CCT), also known as the TCP1 ring complex (TRiC). This complex consists of two identical stacked rings, each containing eight different proteins. Unfolded polypeptides enter the central cavity of the complex and are folded in an ATP-dependent manner. The complex folds various proteins, including actin and tubulin. Two transcript variants encoding different isoforms have been found for this gene.
Immunogen	Purified recombinant fragment of human CCT2 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	10576
Other Names	T-complex protein 1 subunit beta, TCP-1-beta, CCT-beta, CCT2, 99D8.1, CCTB
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CCT2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCT2 {ECO:0000303|PubMed:25467444, ECO:0000312|HGNC:HGNC:1615}
Function	Component of the chaperonin-containing T-complex (TRiC), a molecular

chaperone complex that assists the folding of actin, tubulin and other proteins upon ATP hydrolysis (PubMed:25467444, PubMed:36493755, PubMed:35449234, PubMed:37193829). The TRiC complex mediates the folding of WRAP53/TCAB1, thereby regulating telomere maintenance (PubMed:25467444). As part of the TRiC complex may play a role in the assembly of BBSome, a complex involved in ciliogenesis regulating transports vesicles to the cilia (PubMed:20080638).

Cellular Location Cytoplasm.

References

1. J Biol Chem. 2009 May 29;284(22):14939-48. 2. Mol Cell Proteomics. 2009 Jan;8(1):157-71.

Images

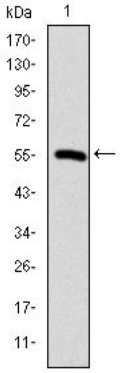


Figure 1: Western blot analysis using CCT2 mAb against human CCT2 (AA: 87-290) recombinant protein. (Expected MW is 47.9 kDa)

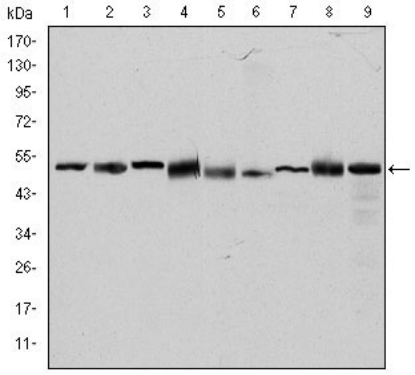


Figure 2: Western blot analysis using CCT2 mouse mAb against Hela (1), MCF-7 (2), Jurkat (3), T47D (4), K562 (5), A431 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

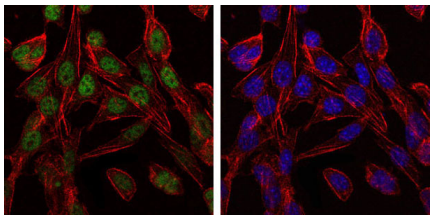


Figure 3: Immunofluorescence analysis of 3T3-L1 cells using CCT2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

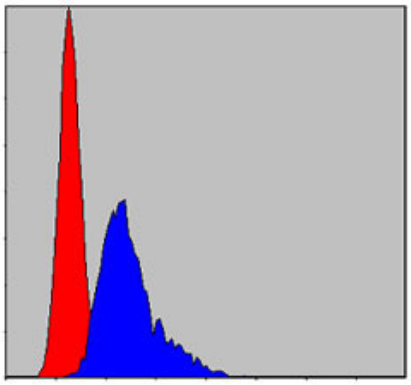


Figure 4: Flow cytometric analysis of NIH/3T3 cells using CCT2 mouse mAb (blue) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.