10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CCT2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1624a

Specification

CCT2 Antibody - Product Information

Application	**WB, FC, ICC, E**
Primary Accession	P78371
Reactivity	**Human, Mouse, Rat, Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**54kDa KDa**

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.

CCT2 Antibody - 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.

CCT2 Antibody - Protein Information

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Name CCT2 {ECO:0000303|PubMed:25467444, ECO:0000312|HGNC:HGNC:1615}

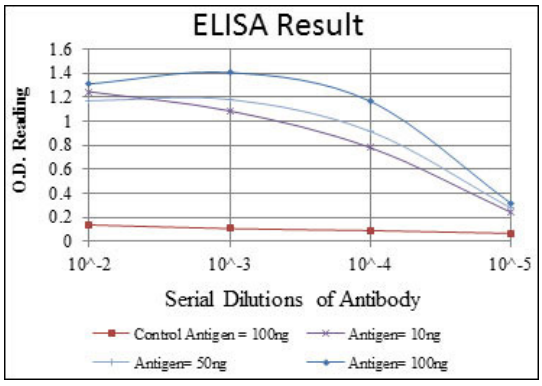
Function
Component of the chaperonin-containing T-complex (TRiC), a molecular chaperone complex that assists the folding of actin, tubulin and other proteins upon ATP hydrolysis (PubMed:25467444, PubMed:36493755, PubMed:35449234, PubMed:37193829). The TRiC complex mediates the folding of WRAP53/TCAB1, 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.

CCT2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

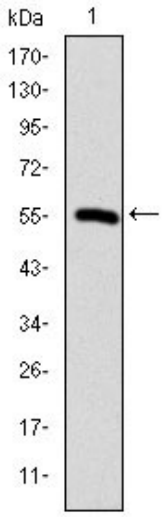


Figure 1: Western blot analysis using CCT2 mAb against human CCT2 (AA: 87-290) recombinant protein. (Expected MW is 47.9 kDa)

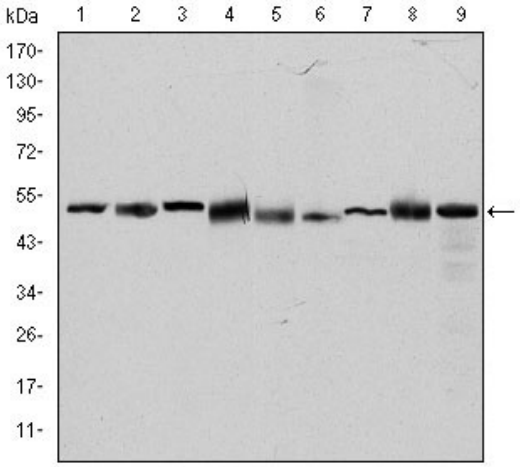


Figure 2: Western blot analysis using CCT2 mouse mAb against Hela (1), MCF-7 (2), Jurkat (3), T47D (4), K562 (5), A431 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

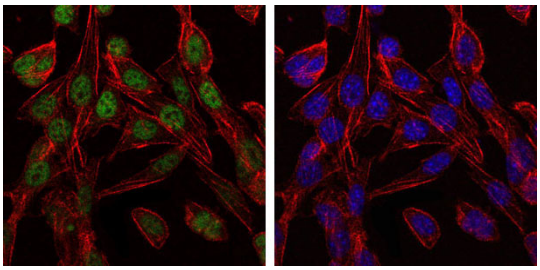


Figure 3: Immunofluorescence analysis of 3T3-L1 cells using CCT2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

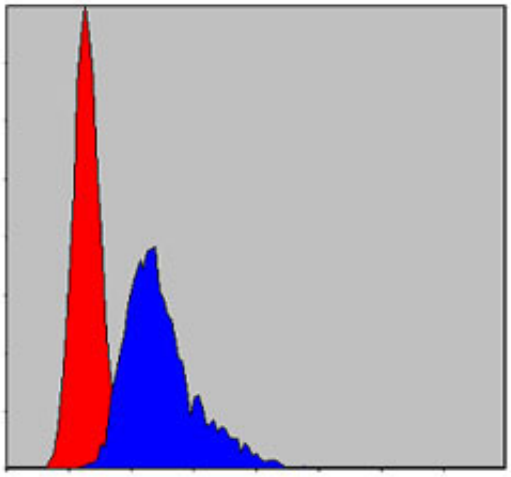


Figure 4: Flow cytometric analysis of NIH/3T3 cells using CCT2 mouse mAb (blue) and negative control (red).

CCT2 Antibody - References

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