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Anti-CCT3 Antibody Picoband™ (monoclonal, 12H4)

Catalog # ABO14341

Product Information

Application	WB, IF, ICC
Primary Accession	P49368
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-CCT3 Antibody Picoband™ (monoclonal, 12H4) . Tested in IF, ICC, WB applications. This antibody reacts with Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7203
Other Names	T-complex protein 1 subunit gamma, TCP-1-gamma, CCT-gamma, Chaperonin containing T-complex polypeptide 1 subunit 3, hTRiC5, CCT3, CCTG, TRIC5
Calculated MW	60534
Application Details	Western blot, 0.1-0.5 □g/ml Immunocytochemistry/Immunofluorescence, 5 □g/ml
Subcellular Localization	Cytoplasm.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Clone Names	Clone: 12H4
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human CCT3, different from the related mouse and rat sequences by one amino acid.
Cross Reactivity	No cross-reactivity with other proteins.
Storage	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.

Protein Information

Name	CCT3
Synonyms	CCTG, TRIC5
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.

Background

T-complex protein 1 subunit gamma is a protein that in humans is encoded by the CCT3 gene. 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. Alternate transcriptional splice variants have been characterized for this gene. In addition, a pseudogene of this gene has been found on chromosome 8.

Images

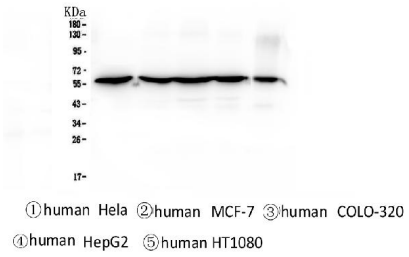
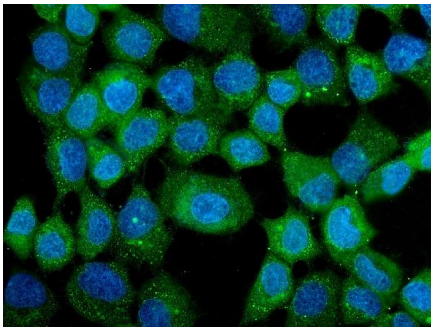


Figure 1. Western blot analysis of CCT3 using anti-CCT3 antibody (M05920).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human MCF-7 whole cell lysates,
Lane 3: human COLO-320 whole cell lysates,
Lane 4: human HepG2 whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-CCT3 antigen affinity purified monoclonal antibody (Catalog # M05920) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system.

Figure 2. IF analysis of CCT3 using anti-CCT3 antibody (M05920).
CCT3 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-CCT3 Antibody



(M05920) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.