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

Anti-TCP1 delta Picoband Antibody

Catalog # ABO12612

Product Information

Application	WB, IHC-P, IHC-F, ICC
Primary Accession	P50991
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for T-complex protein 1 subunit delta(CCT4) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	10575
Other Names	T-complex protein 1 subunit delta, TCP-1-delta, CCT-delta, Stimulator of TAR RNA-binding, CCT4, CCTD, SRB
Calculated MW	57924
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, By Heat Immunohistochemistry(Frozen Section), 0.5-1 □g/ml Western blot, 0.1-0.5 □g/ml Immunocytochemistry, 0.5-1 □g/ml
Subcellular Localization	Cytoplasm . Melanosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, cilium basal body . Identified by mass spectrometry in melanosome fractions from stage I to stage IV. .
Source	Eukaryota
Protein Name	T-complex protein 1 subunit delta
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human TCP1 delta recombinant protein (Position: R452-R539). Human TCP1 delta shares 97.7% amino acid (aa) sequence identity with both mouse and rat TCP1 delta.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

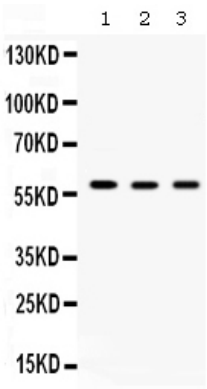
Protein Information

Name	CCT4
Synonyms	CCTD, SRB
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. Melanosome Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:P80315} Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Background

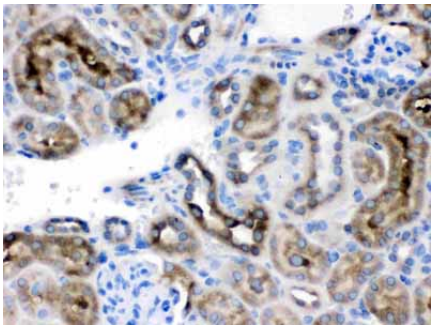
T-complex protein 1 subunit delta is a protein that in humans is encoded by the CCT4 gene. This gene is mapped to 2p15. The chaperonin containing TCP1 complex (CCT), also called the TCP1 ring complex, consists of 2 back-to-back rings, each containing 8 unique but homologous subunits, such as CCT4. CCT assists the folding of newly translated polypeptide substrates through multiple rounds of ATP-driven release and rebinding of partially folded intermediate forms. Substrates of CCT include the cytoskeletal proteins actin and tubulin, as well as alpha-transducin.

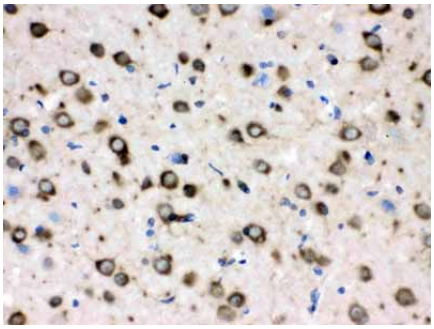
Images



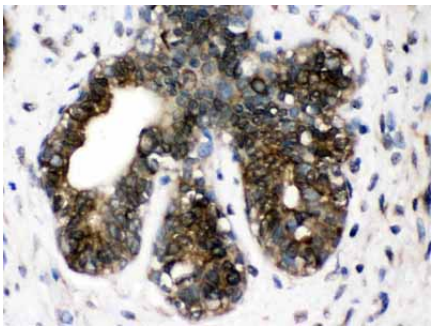
Western blot analysis of TCP1 delta expression in rat brain extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). TCP1 delta at 58KD was detected using rabbit anti- TCP1 delta Antigen Affinity purified polyclonal antibody (Catalog # ABO12612) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

TCP1 delta was detected in paraffin-embedded sections of mouse kidney tissues using rabbit anti- TCP1 delta Antigen Affinity purified polyclonal antibody (Catalog #ABO12612) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .





TCP1 delta was detected in paraffin-embedded sections of rat brain tissues using rabbit anti- TCP1 delta Antigen Affinity purified polyclonal antibody (Catalog #ABO12612) at 1 μg/mL. The immunohistochemical section was developed using SABC method .



TCP1 delta was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- TCP1 delta Antigen Affinity purified polyclonal antibody (Catalog #ABO12612) at 1 μg/mL. The immunohistochemical section was developed using SABC method .

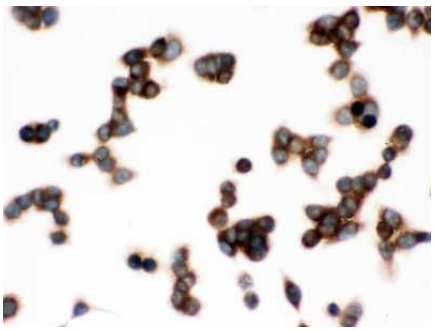


Figure 5. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in immunocytochemical section of LOVO cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μg/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

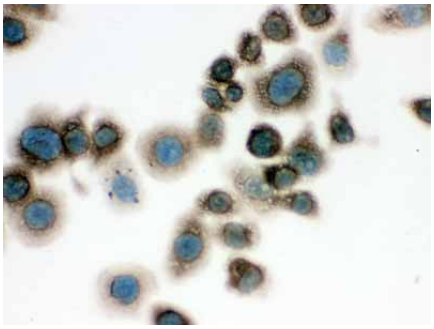


Figure 6. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in immunocytochemical section of Neuro-2a cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μg/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Figure 7. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in immunocytochemical section of NRK cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

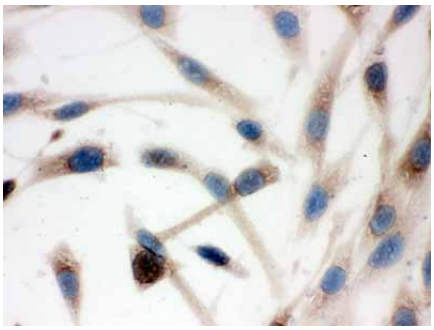


Figure 8. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in immunocytochemical section of SHG-44 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

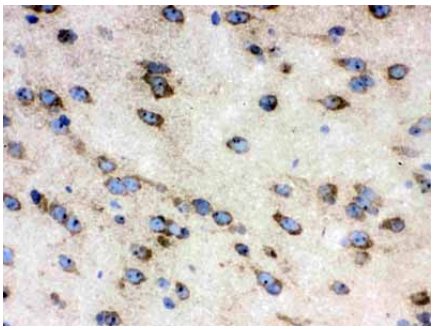


Figure 9. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in frozen section of mouse brain tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

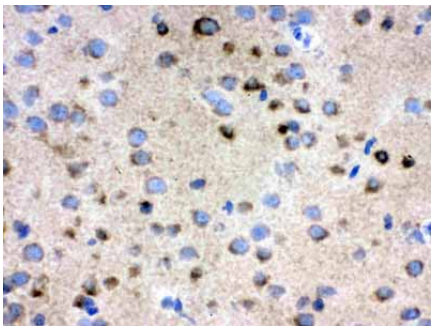


Figure 10. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in frozen section of rat brain tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.