

## **Anti-TCP1** delta Picoband Antibody

**Catalog # ABO12612** 

## **Specification**

# **Anti-TCP1 delta Picoband Antibody - Product Information**

Application WB, IHC-P, IHC-F, ICC

Primary Accession P50991
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal 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.

## Anti-TCP1 delta Picoband Antibody - 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 MW KDa

### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, By Heat<br/>br>Immunohistochemistry(Frozen Section), 0.5-1  $\mu$ g/ml<br/>br> Western blot, 0.1-0.5  $\mu$ g/ml<br/>br>Immunocytochemistry, 0.5-1  $\mu$ g/ml<br/>br>

# **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. .

#### **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.

# **Anti-TCP1** delta Picoband Antibody - 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:<a href="http://www.uniprot.org/citations/25467444" target="\_blank">25467444</a>, PubMed:<a href="http://www.uniprot.org/citations/36493755" target="\_blank">36493755</a>, PubMed:<a href="http://www.uniprot.org/citations/35449234" target="\_blank">35449234</a>, PubMed:<a href="http://www.uniprot.org/citations/37193829" target="\_blank">37193829</a>). The TRiC complex mediates the folding of WRAP53/TCAB1, thereby regulating telomere maintenance (PubMed:<a href="http://www.uniprot.org/citations/25467444" target="\_blank">25467444</a>). 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:<a href="http://www.uniprot.org/citations/20080638" target=" blank">20080638</a>).

#### **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.

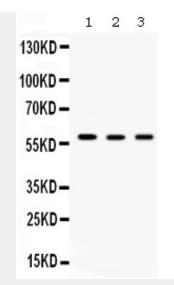
## Anti-TCP1 delta Picoband Antibody - Protocols

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

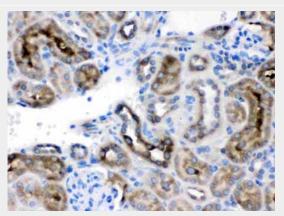
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Anti-TCP1 delta Picoband Antibody - Images

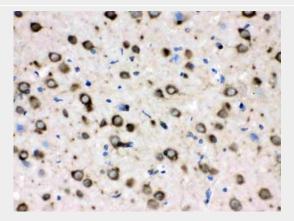




Western blot analysis of TCP1 delta expression in rat brain extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). TCP1 delta at 58KD was detected using rabbit anti-TCP1 delta Antigen Affinity purified polyclonal antibody (Catalog # ABO12612) at  $0.5\ \hat{l}_4$ g/mL. The blot was developed using chemiluminescence (ECL) method .

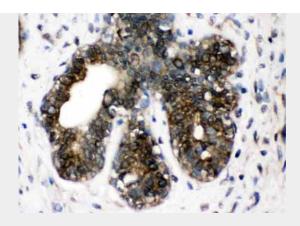


TCP1 delta was detected in paraffin-embedded sections of mouse kidney tissues using rabbit anti-TCP1 delta Antigen Affinity purified polyclonal antibody (Catalog #ABO12612) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .



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  $\hat{l}^{1}/4$ g/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  $\hat{l}^4$ g/mL. The immunohistochemical section was developed using SABC method .

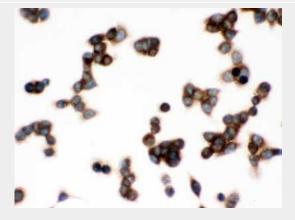


Figure 5. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in immunocytochemical section of LOVO cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $11\frac{1}{4}$ g/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at  $4\text{Å}^{\circ}\text{C}$ . Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at  $37\text{Å}^{\circ}\text{C}$ . The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

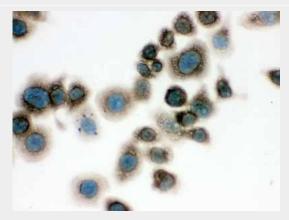


Figure 6. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in immunocytochemical section of Neuro-2a cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $11\frac{1}{4}$ g/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 44°C. Biotinylated goat anti-rabbit IgG was



used as secondary antibody and incubated for 30 minutes at 37ŰC. 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  $11\frac{1}{4}$ g/ml rabbit anti-TCP1 delta Antibody (ABO12612) overnight at 44°C. Biotinylated goat anti-rabbit lgG was used as secondary antibody and incubated for 30 minutes at 374°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

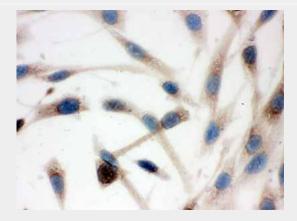


Figure 8. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in immunocytochemical section of SHG-44 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat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

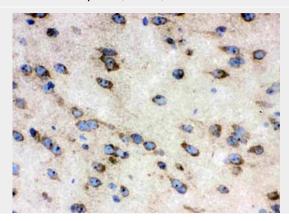




Figure 9. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in frozen section of mouse brain tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat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

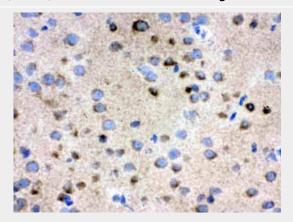


Figure 10. IHC analysis of TCP1 delta using anti-TCP1 delta antibody (ABO12612).TCP1 delta was detected in frozen section of rat brain tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum.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

# Anti-TCP1 delta Picoband Antibody - 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.