

Anti-TCP1 beta Picoband Antibody

Catalog # ABO12677

Specification

Anti-TCP1 beta Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP78371HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for T-complex protein 1 subunit beta(CCT2) detection. Tested withWB, IHC-P in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TCP1 beta Picoband Antibody - Additional Information

Gene ID 10576

Other Names T-complex protein 1 subunit beta, TCP-1-beta, CCT-beta, CCT2, 99D8.1, CCTB

Calculated MW 57488 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

 Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization Cytoplasm .

Protein Name T-complex protein 1 subunit beta

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human TCP1 beta recombinant protein (Position: E414-C535). Human TCP1 beta shares 95.9% and 93.4% amino acid (aa) sequence identity with mouse and rat TCP1 beta, respectively.

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 beta Picoband Antibody - 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:35449234, 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.

Anti-TCP1 beta Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-TCP1 beta Picoband Antibody - Images





Western blot analysis of TCP1 beta expression in rat testis extract (lane 1), mouse spleen extract (lane 2) and SW620 whole cell lysates (lane 3). TCP1 beta at 57KD was detected using rabbit anti-TCP1 beta Antigen Affinity purified polyclonal antibody (Catalog # ABO12677) at 0.5 \hat{l}_{4} g/mL. The blot was developed using chemiluminescence (ECL) method .



TCP1 beta was detected in paraffin-embedded sections of mouse gaster tissues using rabbit anti-TCP1 beta Antigen Affinity purified polyclonal antibody (Catalog # ABO12677) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .



TCP1 beta was detected in paraffin-embedded sections of rat gaster tissues using rabbit anti-TCP1 beta Antigen Affinity purified polyclonal antibody (Catalog # ABO12677) at 1 \hat{l}_4 g/mL. The immunohistochemical section was developed using SABC method .





TCP1 beta was detected in paraffin-embedded sections of human testis tissues using rabbit anti-TCP1 beta Antigen Affinity purified polyclonal antibody (Catalog # ABO12677) at 1 $\hat{1}/_4$ g/mL. The immunohistochemical section was developed using SABC method .

Anti-TCP1 beta Picoband Antibody - Background

T-complex protein 1 subunit beta (TCP1 beta) is a protein that in humans is encoded by the CCT2 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. Two transcript variants encoding different isoforms have been found for this gene.