10320 Camino Santa Fe, Suite G
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TCP1 beta Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54438

Specification

TCP1 beta Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	P78371
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**57 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human CCT2**
Epitope Specificity	**131-230/535**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm.**
SIMILARITY	**Belongs to the TCP-1 chaperonin family.**
SUBUNIT	**Heterooligomeric complex of about 850 to 900 kDa that forms two stacked rings, 12 to 16 nm in diameter. Interacts with PACRG. Component of the BBS/CCT complex composed at least of MKKS, BBS10, BBS12, TCP1, CCT2, CCT3, CCT4, CCT5 AND CCT8.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
CCT2 is one of eight largely unrelated subunit proteins found in a protein chaperone complex known as the chaperonin-containing TCP-1 (CCT) or TRiC complex. The CCT complex is an abundanct cytoslic component that is credited with helping newly synthesized polypeptides adopt the correct conformation (1). Proteins that fold and assemble with the help of CCT include the cytoskeletal proteins actin and tubulin as well as up to 15% of newly synthesized eukaryotic proteins (2). CCT2 is the β-subunit of the chaperone complex and is one of several CCT proteins that exhibit increased expression in response to stress. This implies that the CCT complex helps cells recover from protein damage by assisting in protein folding and assembly (3). CCT subunit levels also change throughout the cell cycle, with lower proteins levels (and reduced chaperone activity) found during induced cell cycle arrest during at M phase (4). Each CCT subunit is thought to perform a specific function during protein folding and assembly (5); CCT2 exhibits both actin and tubulin binding activities (6,3) but the exact molecular function on this subunit remains uncertain.

TCP1 beta Polyclonal 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~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

TCP1 beta Polyclonal 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: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.

TCP1 beta Polyclonal 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

TCP1 beta Polyclonal Antibody - Images

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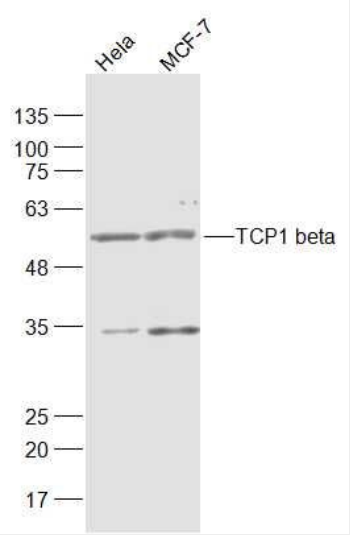
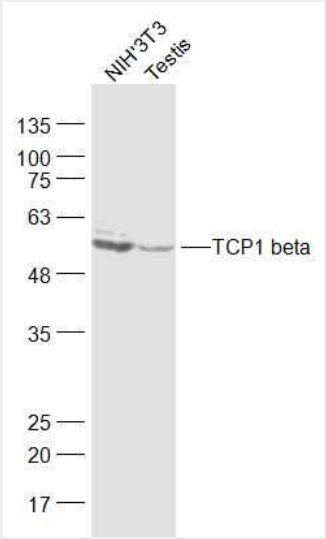


Sample:
Hela(Human) Cell Lysate at 30 ug
MCF-7(Human) Cell Lysate at 30 ug
Primary: Anti-TCP1 beta (bs-11267R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 57 kD
Observed band size: 57 kD



Sample:
NIH/3T3(Mouse) Cell Lysate at 30 ug
Testis (Mouse) Lysate at 40 ug
Primary: Anti-TCP1 beta (bs-11267R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 57 kD
Observed band size: 57 kD

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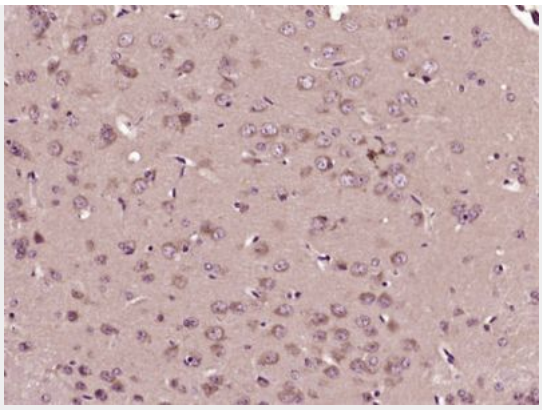

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TCP1 beta) Polyclonal Antibody, Unconjugated (bs-11267R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.