

## Anti-TCP1 beta Polyclonal Antibody

### Product Details

Ig Type:	IgG
Reactivity:	Human, Mouse (predicted: Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Zebrafish, Sheep)
Molecular Weight:	Theoretical: 57 kDa. Actual: 57 kDa.
Purification:	Protein A purified

### Applications

Verified Activity:	<p>1. Sample: Hela (Human) Cell Lysate at 30 µg MCF-7 (Human) Cell Lysate at 30 µg Primary: Anti-TCP1 beta (TMAB-13435) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 57 kD Observed band size: 57 kD</p> <p>2. Sample: NIH/3T3 (Mouse) Cell Lysate at 30 µg Testis (Mouse) Lysate at 40 µg Primary: Anti-TCP1 beta (TMAB-13435) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 57 kD Observed band size: 57 kD</p> <p>3. Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (TCP1 beta) Polyclonal Antibody, Unconjugated (TMAB-13435) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.</p>
Application:	WB, IHC-P, IHC-Fr, IF
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

### Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

### Antigen Details

Immunogen: KLH conjugated synthetic peptide: human CCT2  
Antigen Species: Human  
Gene ID: 10576  
Uniprot ID: P78371

---

### Research Background

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 abundant cytosolic 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  $\beta$ -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 protein 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481