

**AP16211PU-N****Polyclonal Antibody to CCT1 / TCP1 (C-term) - Aff - Purified**

<b>Alternate names:</b>	CCT alpha, CCTA, Chaperonin containing T complex polypeptide 1 subunit 1, T-complex protein 1 subunit alpha, TCP-1-alpha, TCP1 alpha
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Background:</b>	TCP1 alpha is a ~60 kDa protein constitutively expressed in almost all eukaryotic cells, and is upregulated during spermatogenesis. It is found in the cytosol as a subunit of a hetero-oligomeric chaperone that is known to be involved in the folding of actin and tubulin. The family of proteins termed chaperonins act to recognize and stabilize polypeptide intermediates during folding, assembly and disassembly, and share many characteristics with Heat Shock Protein 70 (HSP 70) including high abundance, induction by environmental stress, and ATPase activity. The chaperonin family includes the mitochondrial HSP60, Escherichia coli GroEL, the plastid Rubisco subunit binding protein, and the archaeobacterial protein TF55. The TCP1 sequence shows nearly 40% identity to TF55, but only minimal similarity to HSP60 and GroEL.
<b>Uniprot ID:</b>	<a href="#">P17987</a>
<b>NCBI:</b>	<a href="#">NP_110379.2</a>
<b>GenelD:</b>	<a href="#">6950</a>
<b>Host:</b>	Goat
<b>Immunogen:</b>	Peptide from C Terminus of the protein sequence according to NP_110379.2; NP_001008897.1. <b>Genename:</b> TCP1 <b>AA Sequence:</b> C-SYEDAVHSGALND
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Ammonium Sulphate Precipitation followed by Antigen Affinity Chromatography using the immunizing peptide <b>Buffer System:</b> Tris saline, pH~7.3 <b>Preservatives:</b> 0.02% Sodium Azide <b>Stabilizers:</b> 0.5% BSA
<b>Applications:</b>	<b>Peptide ELISA:</b> 1/32000 (Detection Limit). <b>Western blot:</b> 0.5-2 µg/ml. Approx 60kDa band observed in Hela, Human Lung and Human Testis lysates (predicted MW of 60kDa according to NP_110379.2). <b>Immunohistochemistry on Paraffin Sections:</b> 1-2 µg/ml. In paraffin embedded Human Testis shows only cytoplasmic staining in some germ cells, and both cytoplasmic and nuclear staining in other germ cells with unstained nucleoli. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody detects CCT1 / TCP1 at C-term. It is expected to recognise both reported isoforms.

**Species Reactivity:** **Tested:** Human.

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**General Readings:** Yaffe MB, Farr GW, Miklos D, Horwich AL, Sternlicht ML, Sternlicht H. TCP1 complex is a molecular chaperone in tubulin biogenesis. *Nature*. 1992 Jul 16;358(6383):245-8. PMID: 1630491

**Pictures:** TA302925 staining (1µg/ml) of Human Lung lysate (RIPA buffer, 35µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



TA302925 (10µg/ml) staining of paraffin embedded Human Testis. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-staining.

