

Product datasheet for **AM20387PU-N**

TCP1 beta (CCT2) Rat Monoclonal Antibody [Clone ID: PK/8/4/4i/2f]

Product data:

Product Type:	Primary Antibodies
Clone Name:	PK/8/4/4i/2f
Applications:	IHC, WB
Recommended Dilution:	Immunohistochemistry on Paraffin Sections: 10 µg/ml. Western Blot.
Reactivity:	Bovine, Canine, Hamster, Monkey, Mouse, Porcine, Rabbit, Rat, Sheep, Human
Host:	Rat
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Mouse CCT b peptide - PPD conjugate
Specificity:	Detects an ~55 kD protein, corresponding to the apparent molecular mass of TCP-1beta on SDS-PAGE immunoblots. This antibody does not react with Human Hsp60 nor with E. coli GroEL proteins.
Formulation:	PBS 10 mM Sodium Phosphate, pH 7.2, 50 mM Sodium Chloride and 0.1 mM PMSF State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	chaperonin containing TCP1 subunit 2
Database Link:	Entrez Gene 12461 Mouse Entrez Gene 299809 Rat Entrez Gene 717182 Monkey Entrez Gene 10576 Human P78371



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Background:

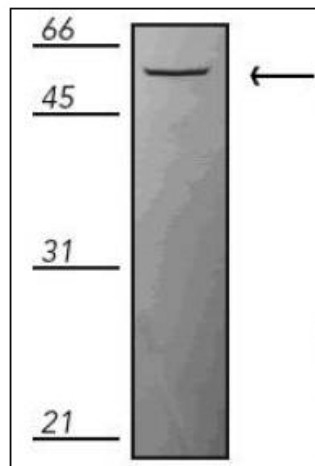
TCP-1 is a subunit of a cytosolic hetero-oligomer chaperone that is known to be involved in the folding of actin and tubulin. This protein is a member of the chaperonin family, which includes Escherichia coli GroEL, the mitochondrial heat-shock protein Hsp60, the plastid Rubisco-subunit-binding protein and the archaeobacterial protein TF55. These chaperonins assist the folding of proteins upon ATP hydrolysis. Nine different subunits of TCP-1 containing chaperonin complexes from mammalian testis and seven different subunits of mouse F9 cells have been identified. The mouse TCP-1 subunits are between 531 and 545 residues in length. Their sequences are 25-36% identical to one another, 27-35% identical to that of TCP-1a and 32-39% identical to that of the archaeobacterial chaperonin, TF55. The genes for these subunits have been named Cctb, Cctg, Cctd, Ccte, Cctz and Ccth, which encode the CCTb, CCTg, CCTd, CCTe, CCTz, and CCTh subunits, respectively, of the Chaperonin Containing TCP-1 (CCT). In bovine, CCT has also been referred to as TRic, TCP-1 ring complex. All the CCT subunits contain motifs that are also shared by all other known chaperonins of prokaryotes and eukaryotic organelles, and that probably relate to their common ATPase function. It has been suggested that each CCT subunit has a specific, independent function, as they are highly diverged from each other but conserved from mammals to yeast. The expansion in the number of types of CCT subunit, compared with other chaperonins, has allowed CCT to carry out more complex functions that are required for the folding and assembly of highly evolved eukaryotic proteins.

Synonyms:

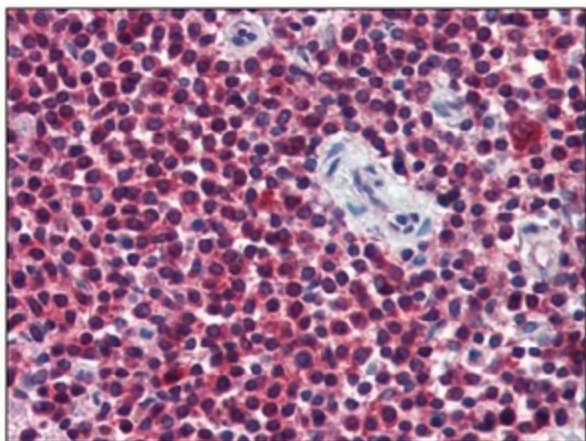
99D8.1, CCT-beta, CCTB, TCP-1 beta

Protein Families:

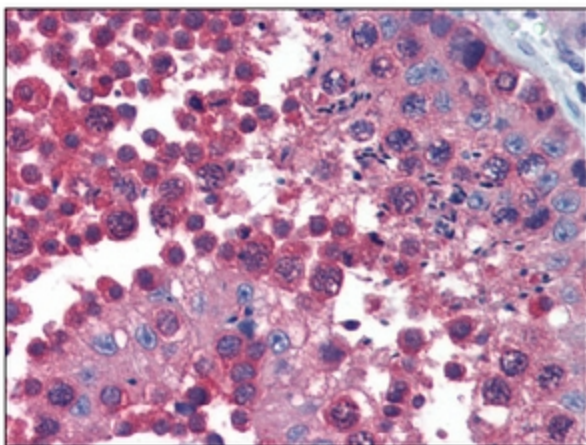
Druggable Genome

Product images:

Western blot analysis of human Jurkat cell lysate.



AM20387PU-N CCT2 antibody staining of Formalin-Fixed, Paraffin-Embedded Human Spleen



AM20387PU-N CCT2 antibody staining of Formalin-Fixed, Paraffin-Embedded Human Testis