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Product datasheet for TA326506

Tcp1 Rat Monoclonal Antibody [Clone ID: 23c]

Product data:

Product Type:	Primary Antibodies
Clone Name:	23c
Applications:	WB
Recommended Dilution:	WB: 1:1000
Reactivity:	Mouse, Rat, Sheep, Rabbit, Hamster, Dog, Cow
Host:	Rat
Isotype:	IgG2c
Clonality:	Monoclonal
Immunogen:	Purified recombinant mouse TCP1 alpha construct encoding the C-terminal half of the 1.8 kb full-length Tcp 1b gene expressed in E. coli. Detects the COOH group.
Formulation:	PBS pH7.4, 50% glycerol, 0.1% sodium azide
Concentration:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	t-complex protein 1
Database Link:	NP_038714 Entrez Gene 24818 RatEntrez Gene 484064 DogEntrez Gene 21454 Mouse P11983

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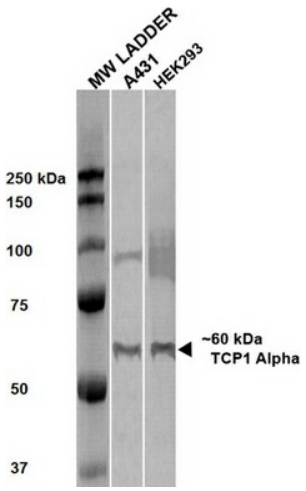
Background: T-complex polypeptide-1 (TCP1) is a ~60 kDa protein constitutively expressed in almost all eukaryotic cells, and is up-regulated during spermatogenesis. It is found in the cytosol as a subunit of a hetero-oligomeric chaperone that is known to be involved in the folding of actin and tubulin. 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 archaebacterial protein TF55. The TCP1 sequence shows nearly 40% identity to TF55, but only minimal similarity to HSP60 and GroEL.

Synonyms: CCT-alpha; CCT1; CCTa; D6S230E; TCP-1-alpha

Note: Detects a 60kDa protein corresponding to the molecular weight of TCP1 alpha; also detects a molecular mass band of ~92kDa. The addition of an alanine (LDDA COOH) prevents binding in ELISA assays to immobilized synthetic peptide sequences. This antibody recognizes other proteins, most notably the p102B' COP subunit of Golgi coatomer. It does not react with human Hsp60 protein.

Product images:



WB of human lysates showing detection of ~60 kDa TCP1-alpha protein using Anti-TCP1, clone 23c. Lane 1: MW ladder. Lane 2: A431 lysate, 20 ug. Lane 3: HEK293 lysate, 20ug. Block: 5% milk + TBST 1hr at RT. Primary antibody: Rat monoclonal Anti-TCP1-alpha, clone 23c incubated for 60 min at RT. Secondary antibody: Goat Anti-Rat HRP antibody (1:1000) for 60 min at RT. Colour Development: TMB solution for 5 min at RT. Predicted/Observed size: ~60 kDa. Other band (s): ~90 kDa.