

**TCP1-alpha Antibody**  
TCP1 alpha Antibody, Clone 23c  
Catalog # ASM10310

**Specification**

**TCP1-alpha Antibody - Product Information**

Application **ICC/IF, WB**  
Primary Accession [P11983](#)  
Other Accession [NP\\_038714.2](#)  
Host **Rat**  
Isotype **IgG2c**  
Reactivity **Mouse, Rat, Rabbit, Hamster, Bovine, Sheep, Dog**  
Clonality **Monoclonal**

**Description**  
Rat Anti-Mouse TCP1-alpha Monoclonal IgG2c

**Target/Specificity**

Detects ~60kDa. Also detects ~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.

**Other Names**

p63 Antibody, Tcp-1 Antibody, TCP1 alpha Antibody, Ccta Antibody, TRic Antibody, Tp63 Antibody, 21454 Antibody, c-cpn Antibody, CCT Antibody, Tcp1 Antibody, ccpn Antibody, AI528772 Antibody, Cct1 Antibody, Tcp 1 Antibody, c cpn Antibody

**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.

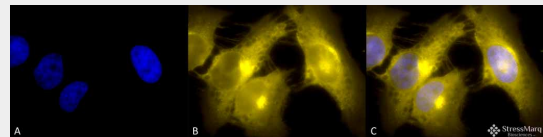
**Purification**

Protein G Purified

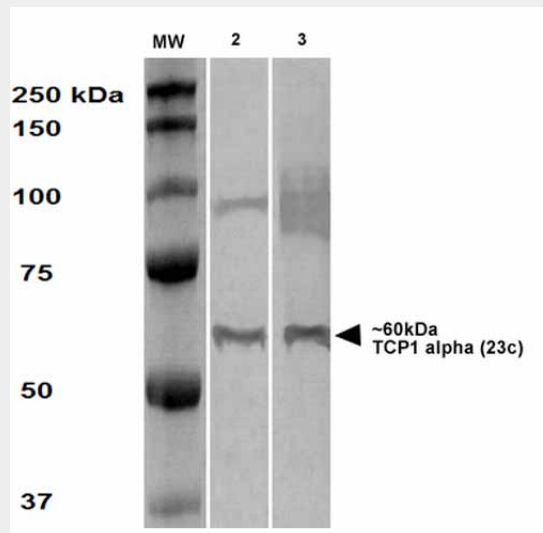
Storage **-20°C**

**Storage Buffer**

PBS pH7.4, 50% glycerol, 0.1% sodium azide



Immunocytochemistry/Immunofluorescence analysis using Rat Anti-TCP1-alpha Monoclonal Antibody, Clone 23c (ASM10310). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-TCP1-alpha Monoclonal Antibody (ASM10310) at 1:100 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rat (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Centrosome. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-TCP1-alpha Antibody. (C) Composite. Heat Shocked at 42°C for 1h.



Western Blot analysis of Human A431 and HEK293 cell lysates showing detection of TCP1 alpha protein using Rat Anti-TCP1 alpha Monoclonal Antibody, Clone 23c (ASM10310). Primary Antibody: Rat Anti-TCP1 alpha Monoclonal Antibody (ASM10310) at 1:1000.

Shipping  
Temperature

**Blue Ice or 4°C**

### **Certificate of Analysis**

1 µg/ml of SMC-478 was sufficient for detection of TCP1 alpha in 20 µg of 3T3 cell lysate by colorimetric immunoblot analysis using Goat anti-rat IgG:HRP as the secondary antibody.

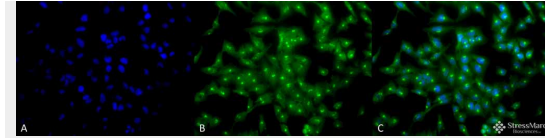
### **Cellular Localization**

Cytoplasm

### **TCP1-alpha 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 Cytometry](#)
- [Cell Culture](#)



Immunocytochemistry/Immunofluorescence analysis using Rat Anti-TCP1-alpha Monoclonal Antibody, Clone 23c (ASM10310). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-TCP1-alpha Monoclonal Antibody (ASM10310) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rat (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Centrosome. Magnification: 20x. Heat Shocked at 42°C for 1h.

### **TCP1-alpha Antibody - 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 archaeobacterial protein TF55. The TCP1 sequence shows nearly 40% identity to TF55, but only minimal similarity to HSP60 and GroEL.