

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

Specification

TCP1-alpha Antibody - Product Information

Application	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

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

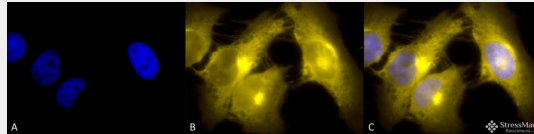
Cytoplasm

TCP1-alpha Antibody - Protocols

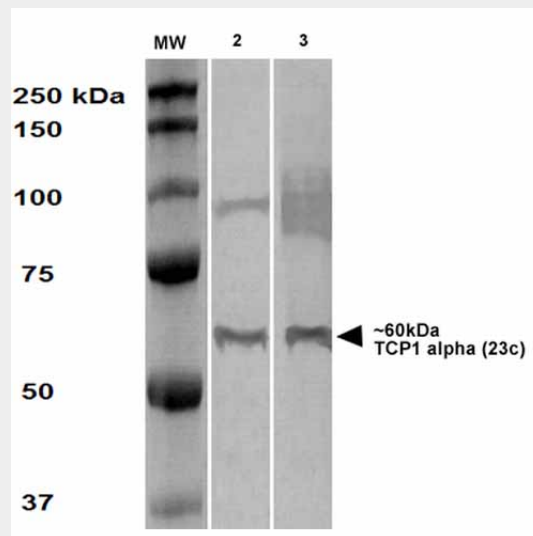
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

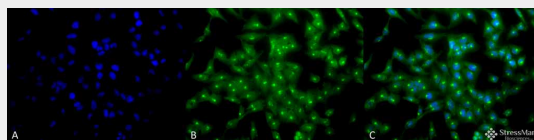
TCP1-alpha Antibody - Images



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.



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.