Datasheet for ABIN1686651

anti-TCP1 alpha/CCTA antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	TCP1 alpha/CCTA (TCP1)
Binding Specificity:	C-Term
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This TCP1 alpha/CCTA antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Immunogen:	Recombinant Mouse TCP1 alpha protein fragment (carboxy terminal region).
Clone:	91a
Isotype:	IgG2a
Specificity:	Detects ~60 & ~92 kDa. Cross reactivity with human HSP60 in WB. Reacts weakly with S. cerevisiae, consistent with the epitope being AKLRS (instead of AKLRA). In C. elegans, it reacts with TCP1 alpha and another CCT subunit. In plants, it recog TCP1 of P. sativum, and the sequence of A. thalania TCP1 over the region of the epitope AKLRA. It has also been shown that it reacts with a subunit of a specialized chaperonin which folds phytochrome.
Cross-Reactivity:	C. elegans, Cow, Dog, Drosophila melanogaster, Guinea Pig, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Saccharomyces cerevisiae

Product Details

Purification:	Protein G Purified

Target Details

Target:	TCP1 alpha/CCTA (TCP1)
Alternative Name:	TCP1 alpha (TCP1 Products)
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.
Gene ID:	21454
NCBI Accession:	NP_038714
UniProt:	P11983

Application Details

Application Notes:	• WB (1:1000) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN1686651 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.
Restrictions:	For Research Use only

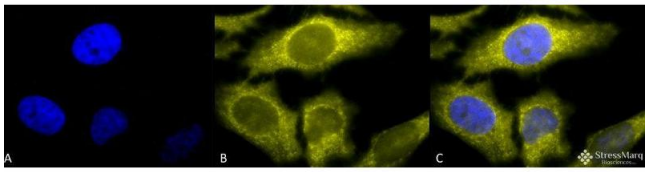
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.1 % sodium azide, Storage buffer may change when conjugated

Handling

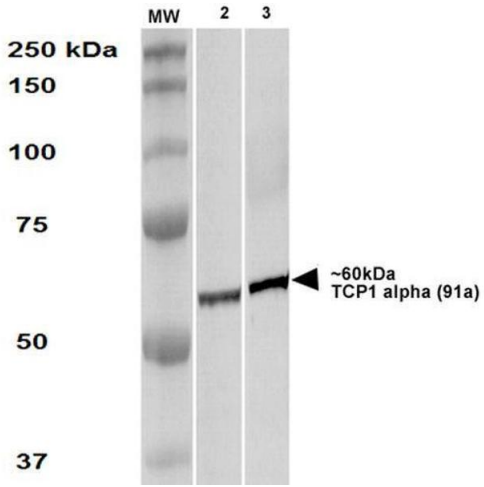
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C

Images



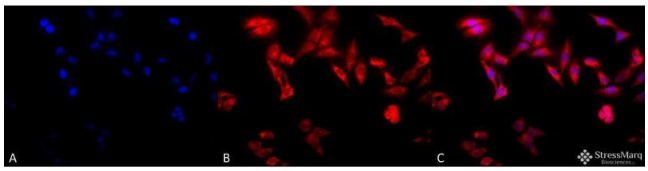
Immunofluorescence (fixed cells)

Image 1. Immunocytochemistry/Immunofluorescence analysis using Rat Anti-TCP1-alpha Monoclonal Antibody, Clone 91a . Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-TCP1-alpha Monoclonal Antibody 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 Blotting

Image 2. Western Blot analysis of Human A431 and HEK293 cell lysates showing detection of TCP1 alpha protein using Rat Anti-TCP1 alpha Monoclonal Antibody, Clone 91a . Primary Antibody: Rat Anti-TCP1 alpha Monoclonal Antibody at 1:1000.



Immunofluorescence (fixed cells)

Image 3. Immunocytochemistry/Immunofluorescence analysis using Rat Anti-TCP1-alpha Monoclonal Antibody, Clone 91a . Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-TCP1-alpha Monoclonal Antibody at 1:100 for 12 hours at 4°C. Secondary Antibody: APC Goat Anti-Rat (red) 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. (A) DAPI (blue) nuclear stain. (B) Anti-TCP1-alpha Antibody. (C) Composite. Heat Shocked at 42°C for 1h.