

TCP-1 η (E-20): sc-13889

BACKGROUND

The protein TCP-1 (t complex polypeptide 1) is a subunit of the hetero-oligomeric complex CCT (chaperonin containing TCP-1) present in the eukaryotic cytosol. The CCT of eukaryotic cytosol is composed of eight different subunit species, TCP-1 α , β , γ , δ , ϵ , ζ , ϵ and θ , each encoded by a different gene. Two ζ subunits have been described: TCP-1 ζ (also designated TCP-1 ζ 1) and TCP-1 ζ 2. TCP-1 subunits are proposed to have independent functions in folding its *in vivo* substrates, the actins and tubulins. TCP-1 was first identified in the mouse as relevant for tail-less and embryonic lethal phenotypes. Sequences homologous to TCP-1 have been isolated in several other species, and the yeast TCP-1 has been shown to encode a molecular chaperone for actin and Tubulin. TCP-1 found in mammalian cells and yeast plays an important role in the folding of cytosolic proteins.

CHROMOSOMAL LOCATION

Genetic locus: CCT7 (human) mapping to 2p13.2; Cct7 (mouse) mapping to 6 C3.

SOURCE

TCP-1 η (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TCP-1 η of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-13889 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TCP-1 η (E-20) is recommended for detection of TCP-1 η of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TCP-1 η (E-20) is also recommended for detection of TCP-1 η in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TCP-1 η siRNA (h): sc-43449, TCP-1 η siRNA (m): sc-43450, TCP-1 η shRNA Plasmid (h): sc-43449-SH, TCP-1 η shRNA Plasmid (m): sc-43450-SH, TCP-1 η shRNA (h) Lentiviral Particles: sc-43449-V and TCP-1 η shRNA (m) Lentiviral Particles: sc-43450-V.

Molecular Weight of TCP-1 η : 58 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, K-562 whole cell lysate: sc-2203 or TCP-1 η (m2): 293T Lysate: sc-110135.

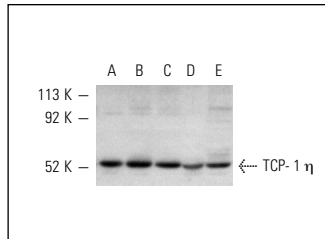
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

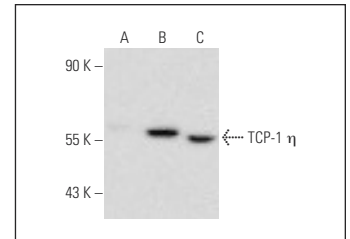
RESEARCH USE

For research use only, not for use in diagnostic procedures.

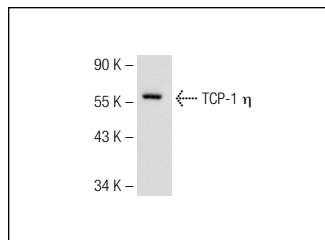
DATA



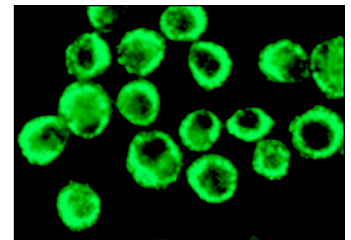
TCP-1 η (E-20): sc-13889. Western blot analysis of TCP-1 η expression in HeLa (A), K-562 (B), A-431 (C), NIH/3T3 (D) whole cell lysates and mouse testis extract (E).



TCP-1 η (E-20): sc-13889. Western blot analysis of TCP-1 η expression in non-transfected 293T: sc-117752 (A), mouse TCP-1 η transfected 293T: sc-110135 (B) and K-562 (C) whole cell lysates.



TCP-1 η (E-20): sc-13889. Western blot analysis of TCP-1 η expression in HL-60 whole cell lysate.



TCP-1 η (E-20): sc-13889. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Kunisawa, J., et al. 2003. The group II chaperonin TRiC protects proteolytic intermediates from degradation in the MHC class I antigen processing pathway. *Mol. Cell* 12: 565-576.
2. Pejanovic, N., et al. 2012. Regulation of nuclear factor κ B (NF κ B) transcriptional activity via p65 acetylation by the chaperonin containing TCP1 (CCT). *PLoS ONE* 7: e42020.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


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Try TCP-1 η (A-8): sc-271951 or TCP-1 η (H-4): sc-390492, our highly recommended monoclonal alternatives to TCP-1 η (E-20).