SANTA CRUZ BIOTECHNOLOGY, INC.

TCP-1 ε (I-20): sc-30513



BACKGROUND

The protein TCP-1 (t complex polypeptide 1) is a subunit of the heterooligomeric 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 , η 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 $\zeta2$. 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: CCT5 (human) mapping to 5p15.2; Cct5 (mouse) mapping to 15 B2.

SOURCE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30513 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

TCP-1 ε (I-20) is recommended for detection of TCP-1 ε of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 ϵ (I-20) is also recommended for detection of TCP-1 ϵ in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TCP-1 ϵ siRNA (h): sc-43447, TCP-1 ϵ siRNA (m): sc-43448, TCP-1 ϵ shRNA Plasmid (h): sc-43447-SH, TCP-1 ϵ shRNA Plasmid (m): sc-43448-SH, TCP-1 ϵ shRNA (h) Lentiviral Particles: sc-43447-V and TCP-1 ϵ shRNA (m) Lentiviral Particles: sc-43448-V.

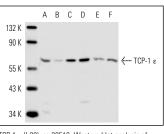
Molecular Weight of TCP-1 ɛ: 60 kDa.

Positive Controls: F9 cell lysate: sc-2245, Caki-1 cell lysate: sc-2224 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



TCP-1 ϵ (I-20): sc-30513. Western blot analysis of TCP-1 ϵ expression in Caki-1 (A), F9 (B), HeLa (C) and ES-2 (D) whole cell lysates and mouse testis (E) and rat testis (F) tissue extracts

STORAGE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **TCP-1** ϵ (G-3): sc-376188 or **TCP-1** ϵ (D-6): sc-374554, our highly recommended monoclonal aternatives to TCP-1 ϵ (I-20).