

Basic Information

Product Name	Anti-TCP1 Antibody	
Gene Name	TCP1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TCP1, different from the related mouse sequence by one amino acid, and from the related rat sequence by two amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	60 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

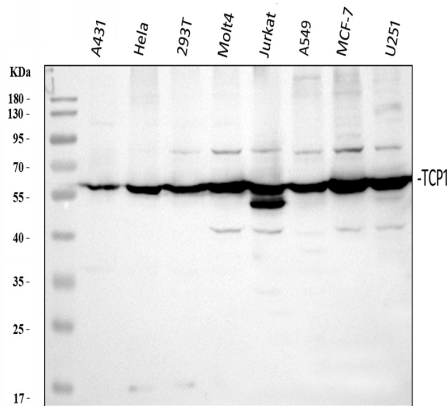
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

T-complex protein 1 subunit alpha is a protein that in humans is encoded by the TCP1 gene. The protein encoded by this gene is a molecular chaperone that is a member of the chaperonin containing TCP1 complex (CCT), also known as the TCP1 ring complex (TRiC). This complex consists of two identical stacked rings, each containing eight different proteins. Unfolded polypeptides enter the central cavity of the complex and are folded in an ATP-dependent manner. The complex folds various proteins, including actin and tubulin. Alternate transcriptional splice variants of this gene, encoding different isoforms, have been characterized. In addition, three pseudogenes that appear to be derived from this gene have been found.

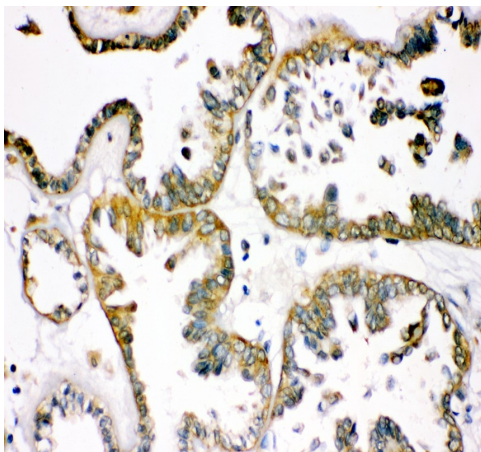
Selected Validation Data



Western blot analysis of TCP1 using anti-TCP1 antibody (PB9826). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

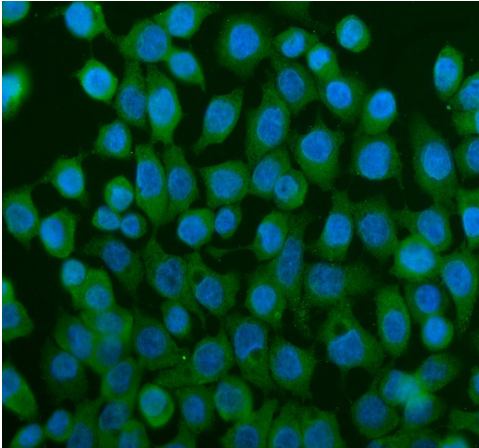
Lane 1: human A431 whole cell lysates,
Lane 2: human Hela whole cell lysates,
Lane 3: human 293T whole cell lysates,
Lane 4: human MOLT4 whole cell lysates,
Lane 5: human Jurkat whole cell lysates,
Lane 6: human A549 whole cell lysates,
Lane 7: human MCF-7 whole cell lysates,
Lane 8: human U251 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TCP1 antigen affinity purified polyclonal antibody (PB9826) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TCP1 at approximately 60 kDa. The expected band size for TCP1 is at 60 kDa.



IHC analysis of TCP1 using anti-TCP1 antibody (PB9826) .

TCP1 was detected in a paraffin-embedded section of human ovary cancer tissue. The tissue section was incubated with rabbit anti-TCP1 Antibody (PB9826) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of TCP1 using anti-TCP1 antibody (PB9826).

TCP1 was detected in an immunocytochemical section of Caco-2 cells. The section was incubated with rabbit anti-TCP1 Antibody (PB9826) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).