

Datasheet for ABIN5693078

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

3 Images

1 Publication



[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	TCP1 alpha/CCTA (TCP1)
Binding Specificity:	AA 515-551, C-Term
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TCP1 alpha/CCTA antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-TCP1 alpha Antibody Picoband® (monoclonal, 2E7)
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human TCP1 alpha, different from the related mouse sequence by one amino acid, and from the related rat sequence by two amino acids.
Sequence:	KFATEAAITI LRIDDLIKLH PESKDDKHGS YEDAVHS
Clone:	2E7
Isotype:	IgG1
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-TCP1 alpha Antibody Picoband® (monoclonal, 2E7) (ABIN5693078). Tested in Flow

Product Details

Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Target Details

Target:	TCP1 alpha/CCTA (TCP1)
Alternative Name:	TCP1 (TCP1 Products)
Background:	Synonyms: T-complex protein 1 subunit alpha, TCP-1-alpha, CCT-alpha, TCP1, CCT1, CCTA Tissue Specificity: Widely expressed. Highest level in placenta, liver, muscle and kidney. Background: 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.
Molecular Weight:	60 kDa
Gene ID:	6950
UniProt:	P17987

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL Immunocytochemistry/Immunofluorescence, 2 µg/mL Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells1. "Entrez Gene: TCP1 t-complex 1". 2. Fonatsch C, Gradl G, Ragoussis J, Ziegler A (Oct 1987). "Assignment of the TCP1 locus to the long arm of human chromosome 6 by in situ hybridization". Cytogenet Cell Genet 45 (2): 109-12. 3. Willison K, Kelly A, Dudley K, Goodfellow P, Spurr N, Groves V, Gorman P, Sheer D, Trowsdale J (Nov 1987). "The human homologue of the mouse t-complex gene, TCP1, is located on chromosome 6 but is not near the HLA region". EMBO J 6 (7): 1967-74.
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Application Details

Restrictions: For Research Use only

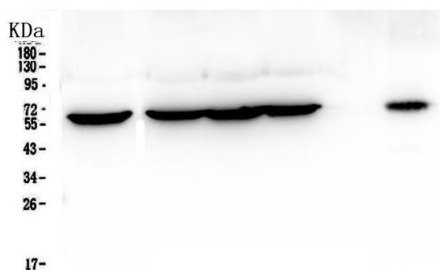
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
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:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in: Gong, Guo, Huang, Sun: "Inhaled nitric oxide alleviates hyperoxia suppressed phosphatidylcholine synthesis in endotoxin-induced injury in mature rat lungs." in: **Respiratory research**, Vol. 7, pp. 5, (2006) ([PubMed](#)).

Images

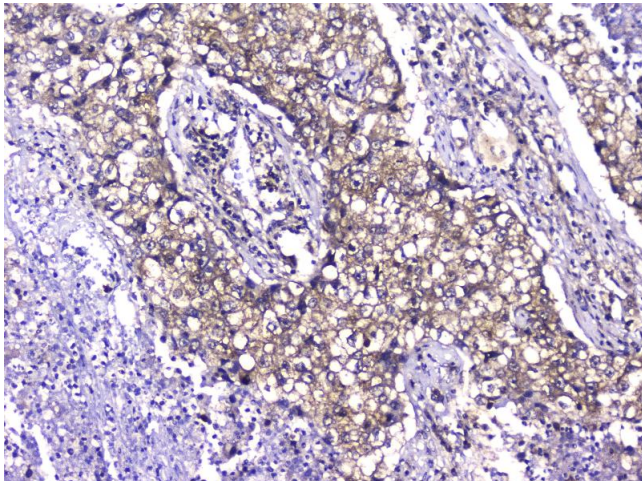


① human HeLa ② human MCF-7 ③ human COLO-320
④ human HepG2 ⑤ Human A431 ⑥ human HT1080

Western Blotting

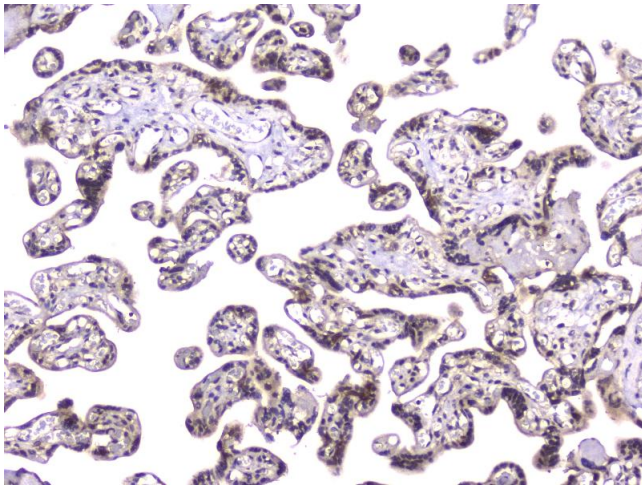
Image 1. Western blot analysis of TCP1 alpha using anti-TCP1 alpha antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human COLO-320 whole cell lysates, Lane 4: human HepG2 whole cell lysates, Lane 5: human

A431 whole cell lysates, Lane 6: human HT1080 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-TCP1 alpha antigen affinity purified monoclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a Biotin Conjugated goat anti-mouse IgG secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system.



Immunohistochemistry

Image 2. IHC analysis of TCP1 alpha using anti-TCP1 alpha antibody . TCP1 alpha was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-TCP1 alpha Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of TCP1 alpha using anti-TCP1 alpha antibody . TCP1 alpha was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-TCP1 alpha Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.