abcam

Product datasheet

Anti-TCP1 alpha antibody [91a] ab90357

3 References 4 Images

Overview

Product name	Anti-TCP1 alpha antibody [91a]
Description	Rat monoclonal [91a] to TCP1 alpha
Host species	Rat
Specificity	Cross reactivity with human Hsp60 has been observed with this antibody in immunoblot analysis.
Tested applications	**Suitable for:** WB, IP, Flow Cyt, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Rabbit, Guinea pig, Hamster, Cow, Dog, Human, Pig, Saccharomyces cerevisiae, Caenorhabditis elegans, Drosophila melanogaster, Monkey **Predicted to work with:** Plants
Immunogen	Recombinant Mouse TCP1 alpha protein fragment (carboxy terminal region).
Epitope	This affinity purified antibody recognizes an epitope in the C terminus of mouse TCP1 alpha (465-AKLRA).
Positive control	HeLa, PC12 and 3T3 and RK-13 cell lysates (all heat shocked). This antibody gave a positive result in IHC in the following FFPE tissue: Human testis seminoma.
General notes	ab90357 reacts weakly with Saccharomyces cerevisiae, consistent with the epitope sequence being AKLRS (instead of AKLRA). In C. elegans, ab90357 reacts with TCP1 alpha and another CCT subunit. In plants, ab90357 recognizes TCP1 of Pisum sativum, and the sequence of Arabidopsis thalania TCP1 over the region of the epitope AKLRA. It has also been shown that ab90357 reacts with a subunit of a specialized chaperonin which folds phytochrome. Abcam is committed to meeting high standards of ethical manufacturing and as such, we will be discontinuing this product, which has been generated by the ascites method, within the next year. We are sorry for any inconvenience this may cause. If you would like help finding an alternative product, please do not hesitate to contact our scientific support team.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20ºC.
Storage buffer	Preservative: 0.09% Sodium Azide Constituents: 50% Glycerol, PBS
Purity	Protein G purified

Primary antibody notes	ab90357 reacts weakly with Saccharomyces cerevisiae, consistent with the epitope sequence being AKLRS (instead of AKLRA). In C. elegans, ab90357 reacts with TCP1 alpha and another CCT subunit. In plants, ab90357 recognizes TCP1 of Pisum sativum, and the sequence of Arabidopsis thalania TCP1 over the region of the epitope AKLRA. It has also been shown that ab90357 reacts with a subunit of a specialized chaperonin which folds phytochrome.
Clonality	Monoclonal
Clone number	91a
Isotype	IgG2a

Applications

Our Abpromise guarantee covers the use of **ab90357** in the following tested applications.

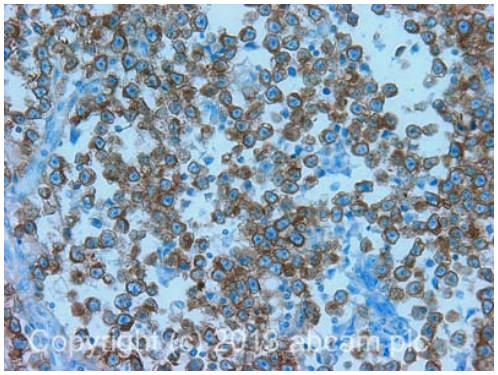
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Predicted molecular weight: 60 kDa.
IP		Use at an assay dependent concentration.
Flow Cyt		Use 1µg for 10^6 cells. ab18450 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function	Molecular chaperone; assists the folding of proteins upon ATP hydrolysis. As part of the BBS/CCT complex may play a role in the assembly of BBSome, a complex involved in ciliogenesis regulating transports vesicles to the cilia. Known to play a role, in vitro, in the folding of actin and tubulin.
Sequence similarities	Belongs to the TCP-1 chaperonin family.
Cellular localization	Cytoplasm. Cytoplasm > cytoskeleton > centrosome.

Images

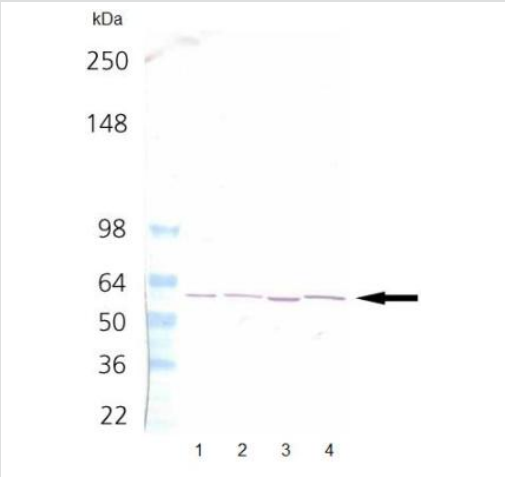


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TCP1 alpha antibody [91a] (ab90357)

IHC image of TCP1 alpha staining in Human testis seminoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab90357, 5µg/ml, for 15 mins at room temperature. A Goat anti-Rat biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TCP1 alpha antibody [91a] (ab90357)



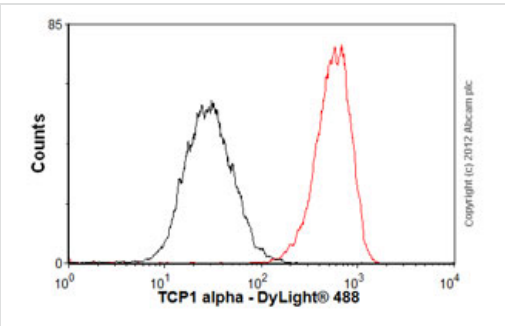
Western blot - Anti-TCP1 alpha antibody [91a] (ab90357)

All lanes : Anti-TCP1 alpha antibody [91a] (ab90357) at 1/1000 dilution

Lane 1 : HELa cell lysate, heat shocked
Lane 2 : PC12 cell lysate, heat shocked
Lane 3 : 3T3 cell lysate, heat shocked
Lane 4 : RK-13 cell lysate, heat shocked

Developed using the ECL technique.

Predicted band size: 60 kDa



Flow Cytometry - Anti-TCP1 alpha antibody [91a] (ab90357)

Overlay histogram showing HeLa cells stained with ab90357 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab90357, 1µg/1x10^6 cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-rat IgG (H+L) (ab98386) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was rat IgG2a [aRTK2758] ab18540, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

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