abcam

Product datasheet

Anti-Cyclophilin 40 antibody ab3562

7 References 5 Images

Overview

Product name	Anti-Cyclophilin 40 antibody
Description	Rabbit polyclonal to Cyclophilin 40
Host species	Rabbit
Specificity	Detects cyclophilin 40 (CyP 40) from Human and Rat tissues and cells. This antibody does not cross-react with CyPA.
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Rat, Human
Immunogen	Synthetic peptide corresponding to Human Cyclophilin 40 aa 356-370. Sequence: AQKDKEKAVYAKMFA Run BLAST with Run BLAST with
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 99% PBS
Purity	Proprietary Purification
Primary antibody notes	Immunophilins are a family of soluble cytosolic receptors capable of binding to one of two major immunosuppressant agents: cyclosporin A (CsA) or FK506. Proteins that bind FK506 are termed FK506 Binding Proteins (FKBPs) and those that bind cyclosporin A are called cyclophilins (CyP). Both CyP:CsA and FKBP:FK506 complexes have been shown to inhibit calcineurin, a calcium

and calmodulin dependent protein phosphatase which has been implicated as an important signaling enzyme in T-cell activation, providing a possible mechanism of immunosuppression by CsA and FK506. Immunophilins function as peptidyl prolyl cis-trans-isomerases (PPIase) whose activity is inhibited by their respective immunosuppressant compounds. As PPIase's, immunophilins accelerate folding of some proteins both in vivo and in vitro by catalyzing slow steps in the initial folding and rearrangement of proline containing proteins. CyP 40, a 40 kDa protein, shares significant homology with smaller CyPA (CyP 18) and FKBP59. CyP 40 exhibits the characteristic CsA binding and isomerase activity of CyP 18, though these activities appear to be less with CyP 40 than with Cyp 18. Like FKBP59, CyP 40 has been found in progesterone receptor complexes. CyP 40 is expressed at similar levels in many tissues.

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab3562 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.
IHC-P		Use at an assay dependent concentration.
ICC/IF		1/200.

Target

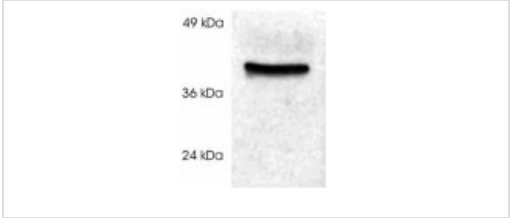
Function PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.

Tissue specificity Widely expressed.

Sequence similarities Belongs to the cyclophilin-type PPIase family. PPIase D subfamily.
Contains 1 PPIase cyclophilin-type domain.
Contains 3 TPR repeats.

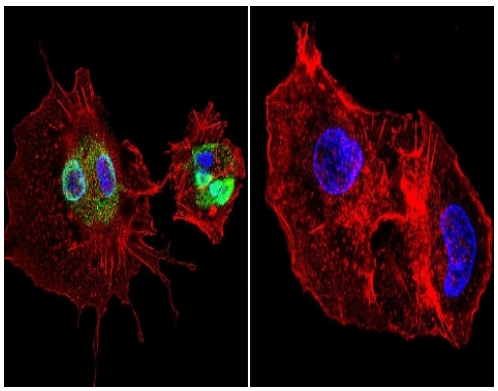
Cellular localization Cytoplasm.

Images



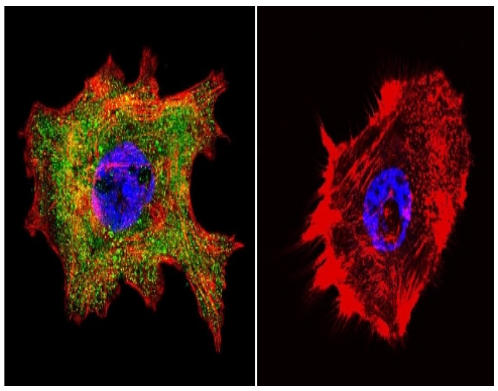
Western blot - Anti-Cyclophilin 40 antibody (ab3562)

ab3562 at a dilution of 1/1000 staining Cyp 40 in Rat spleen lysate by Western blot.



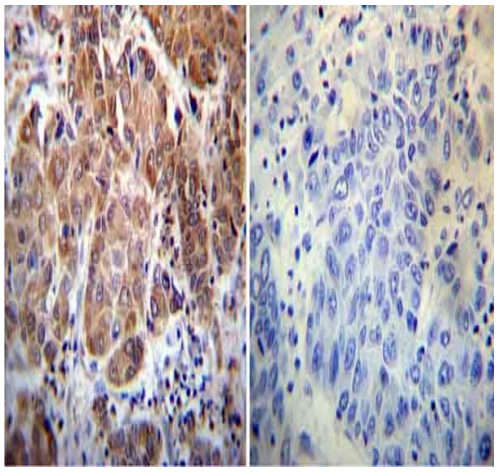
Immunocytochemistry/ Immunofluorescence - Anti-Cyclophilin 40 antibody (ab3562)

Immunocytochemistry/Immunofluorescence analysis of HepG2 cells labeling Cyclophilin 40 (green) with ab3562 at 1/200. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.



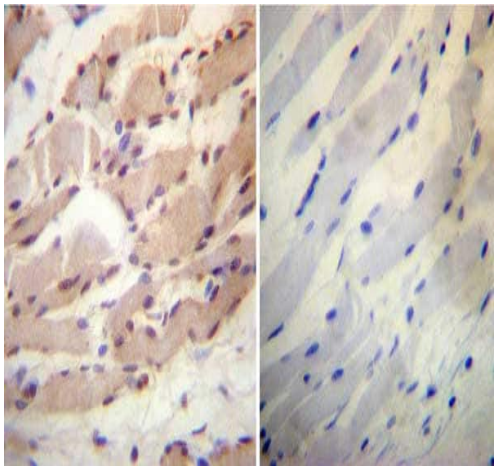
Immunocytochemistry/ Immunofluorescence - Anti-Cyclophilin 40 antibody (ab3562)

Immunocytochemistry/Immunofluorescence analysis of A431 cells labeling Cyclophilin 40 (green) with ab3562 at 1/200. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclophilin 40 antibody (ab3562)

Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human hepatocarcinoma tissue. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH 6.0) buffer, microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at aab3562) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclophilin 40 antibody (ab3562)

Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human skeletal muscle tissue. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH 6.0) buffer, microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1/100 with a rabbit polyclonal antibody recognizing Cyclophilin D (ab3562) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

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