abcam

Product datasheet

Anti-LDL Receptor antibody ab30532

12 Abreviews 82 References 6 Images

Overview

Product name	Anti-LDL Receptor antibody
Description	Rabbit polyclonal to LDL Receptor
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, ICC/IF, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide: SVADTKGVKRRTL , corresponding to amino acids 499-511 of Mouse LDL Receptor 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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 40% Glycerol, 0.1% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab30532 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
IHC-P	★★★★★ (1)	1/400.
ICC/IF	★★★★★ (1)	1/100 - 1/400.
WB	★★★★☆ (5)	Use at an assay dependent concentration. Predicted molecular weight: 95 kDa.

Target

Function
Binds LDL, the major cholesterol-carrying lipoprotein of plasma, and transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. In case of HIV-1 infection, functions as a receptor for extracellular Tat in neurons, mediating its internalization in uninfected cells.

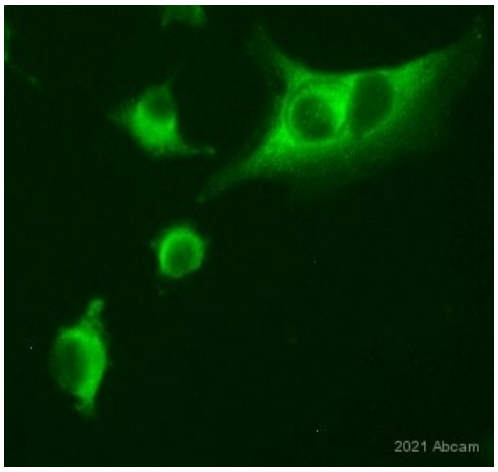
Involvement in disease
Defects in LDLR are the cause of familial hypercholesterolemia (FH) [MIM:143890]; a common autosomal semi-dominant disease that affects about 1 in 500 individuals. The receptor defect impairs the catabolism of LDL, and the resultant elevation in plasma LDL-cholesterol promotes deposition of cholesterol in the skin (xanthelasma), tendons (xanthomas), and coronary arteries (atherosclerosis).

Sequence similarities
Belongs to the LDLR family.
Contains 3 EGF-like domains.
Contains 7 LDL-receptor class A domains.
Contains 6 LDL-receptor class B repeats.

Post-translational modifications
N- and O-glycosylated.
Ubiquitinated by MYLIP leading to degradation.

Cellular localization
Cell membrane. Endomembrane system. Membrane > clathrin-coated pit. Found distributed from the plasma membrane to intracellular compartments.

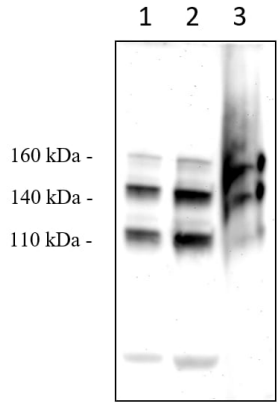
Images



Immunocytochemistry - Anti-LDL Receptor antibody (ab30532)

This image is courtesy of an anonymous Abreview

Immunocytochemistry analysis of acetone-fixed human Liver cells, Hep2G staining with ab30532 at 1/200 dilution. Secondary antibody was FITC rabbit IgG at 1/400 dilution. Samples were incubated with the primary antibody with Serum/PBS for 1 hours at 21°C. Blocking was done using 5% serum for 15 minutes at 21°C.



Western blot - Anti-LDL Receptor antibody (ab30532)

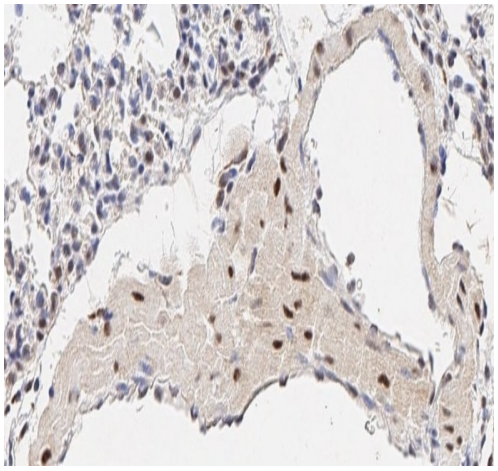
All lanes : Anti-LDL Receptor antibody (ab30532) at 1/200 dilution

Lane 1 : RAW 264.7 Cells at 25 µg
Lane 2 : RAW 264.7 Cells at 50 µg
Lane 3 : Rat Liver Supernatant at 50 µg

Secondary
All lanes : Anti-Rabbit-IgG-HRP at 1/7000 dilution

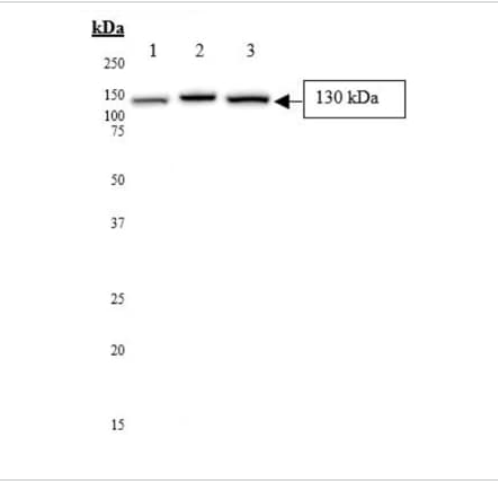
Developed using the ECL technique.

Predicted band size: 95 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LDL Receptor antibody (ab30532)

Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) mouse lung tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with LDL receptor polyclonal antibody, ab30532, at a 1:100 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).



Western blot - Anti-LDL Receptor antibody (ab30532)

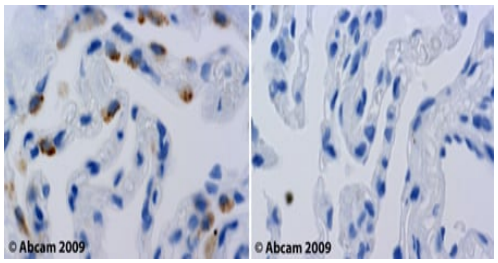
All lanes : Anti-LDL Receptor antibody (ab30532)

Lane 1 : HeLa Cell Lysate
Lane 2 : HepG2 Cell Lysate
Lane 3 : Huh7 Cell Lysate

Lysates/proteins at 50 µg per lane.

Secondary
All lanes : Mouse monoclonal [6F12] to Cytomegalovirus (**ab6500**) (Anti-Rabbit IgG (HRP) conjugate)

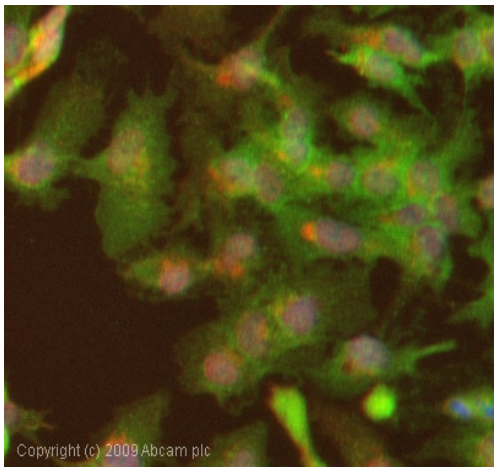
Predicted band size: 95 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LDL Receptor antibody (ab30532)

ab30532 staining LDL receptor in human lung parenchyma.
Left panel: with primary antibody at 1/400. Right panel: isotype control.
Sections were stained using an automated system (DAKO Autostainer Plus), at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers citrate pH6.1. Slides were peroxidase blocked in 3% H_2O_2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX.

Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Immunocytochemistry/ Immunofluorescence - Anti-LDL Receptor antibody (ab30532)

ICC/IF image of ab30532 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab30532, 1/400) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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