

# Anti-VLDL Receptor/VLDL-R antibody [1H10] ab75591

★★★★★ [3 Abreviews](#) [2 References](#) [2 Images](#)

### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-VLDL Receptor/VLDL-R antibody [1H10]   |
| <b>Description</b>         | Mouse monoclonal [1H10] to VLDL Receptor/VLDL-R   |
| <b>Host species</b>        | Mouse   |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, ELISA, Flow Cyt  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Human  |
| <b>Immunogen</b>           | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.   |
| <b>General notes</b>       | <p>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.</p> <p>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&amp;As</p> |

### Properties

|                               |   |
|-------------------------------|---|
| <b>Form</b>                   | Liquid  |
| <b>Storage instructions</b>   | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |
| <b>Storage buffer</b>         | pH: 6.60<br>Constituents: 0.58% Sodium chloride, 0.0292% EDTA, 0.82% Sodium phosphate                   |
| <b>Purity</b>                 | Protein A purified  |
| <b>Purification notes</b>     | Produced in a VLDL Receptor/VLDL-R knockout mouse.  |
| <b>Primary antibody notes</b> | Blocks apoE4 binding.   |
| <b>Clonality</b>              | Monoclonal  |
| <b>Clone number</b>           | 1H10  |
| <b>Isotype</b>                | IgG1  |

### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab75591 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          | ★★★★★ (2) | Use at an assay dependent concentration.   |
| ELISA       |           | Use at an assay dependent concentration.   |
| Flow Cyt    | ★★★★★ (1) | Use 2µg for 10 <sup>6</sup> cells.<br><b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

## Target

### Function

Binds VLDL and transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. Binding to Reelin induces tyrosine phosphorylation of Dab1 and modulation of Tau phosphorylation.

### Tissue specificity

Abundant in heart and skeletal muscle; also ovary and kidney; not in liver.

### Involvement in disease

Defects in VLDLR are the cause of cerebellar ataxia mental retardation and dysequilibrium syndrome type 1 (CMARQ1) [MIM:224050]; also known as dysequilibrium syndrome (DES) or non-progressive cerebellar disorder with mental retardation. CMARQ1 is a congenital, non-progressive cerebellar ataxia associated with disturbed equilibrium, delayed ambulation, mental retardation and cerebellar hypoplasia. Additional features include short stature, strabismus, pes planus and, rarely, seizures.

### Sequence similarities

Contains 3 EGF-like domains.  
Contains 8 LDL-receptor class A domains.  
Contains 6 LDL-receptor class B repeats.

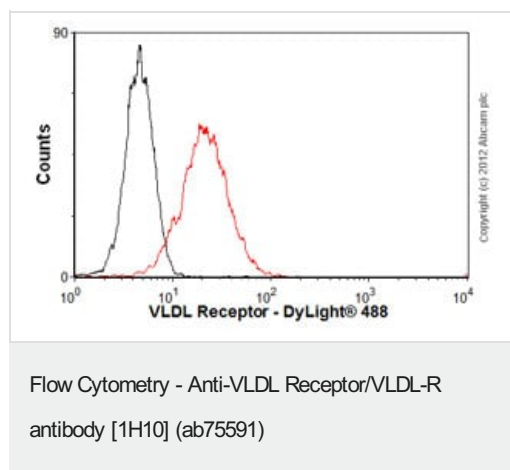
### Post-translational modifications

Ubiquitinated at Lys-839 by MYLIP leading to degradation.

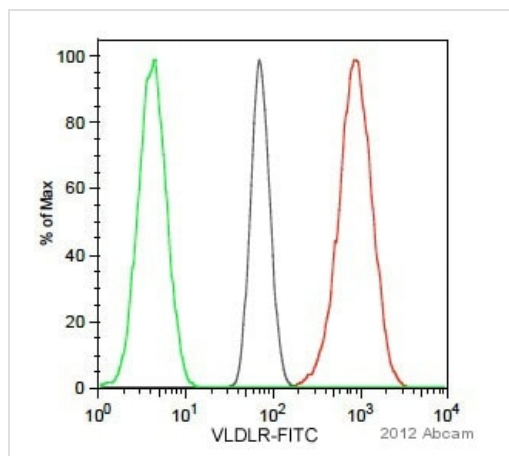
### Cellular localization

Membrane. Membrane > clathrin-coated pit.

## Images



Overlay histogram showing HEK293 cells stained with ab75591 (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 (ab75591, 2µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.



Flow Cytometry - Anti-VLDL Receptor/VLDL-R  
antibody [1H10] (ab75591)

This image is courtesy of an anonymous Abreview

Flow cytometry analysis of Human THP-1 cell lines, staining VLDL Receptor/VLDL-R (red histogram) with ab75591.

Cells were taken from suspension culture and washed with PBS/BSA before fixation. Cells were blocked and permeabilized in 10% donkey serum/0.3 M glycine/0.1% BSA/0.1% Tween-20 in PBS for 20 mins at room temperature. The sample was incubated with the primary antibody (2  $\mu$ g/ $10^6$  cells in 0.1% BSA/0.1% Tween-20 in PBS) for 30 minutes at 22°C. A FITC-conjugated donkey anti-mouse polyclonal IgG (30  $\mu$ g/ml) was used as the secondary antibody.

**Gating Strategy:** FSC/SSC

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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