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## LDLR Antibody

| Product Code        | CSB-RA575353A0HU   |
|---------------------|--|
| Storage             | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.  |
| Uniprot No.         | P01130   |
| Immunogen           | A synthesized peptide derived from human LDL Receptor  |
| Species Reactivity  | Human  |
| Tested Applications | ELISA, IHC, IF, FC; Recommended dilution: IHC:1:50-1:200, IF:1:20-1:200, FC:1:20-1:200   |
| Relevance           | 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. |
| Form                | Liquid   |
| Conjugate           | Non-conjugated   |
| Storage Buffer      | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.  |
| Purification Method | Affinity-chromatography  |
| Isotype             | Rabbit IgG   |
| Clonality           | Monoclonal   |
| Product Type        | Recombinant Antibody   |
| Immunogen Species   | Homo sapiens (Human)   |
| Research Area       | Cancer; Cardiovascular; Metabolism; Signal transduction  |
| Gene Names          | LDLR   |
| Accession NO.       | 2B10   |

Image



IHC image of CSB-RA575353A0HU diluted at 1:100 and staining in paraffin-embedded human adrenal gland tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

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IHC image of CSB-RA575353A0HU diluted at 1:100 and staining in paraffin-embedded human liver tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of Hela Cells with CSB-RA575353A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Overlay histogram showing Hela cells stained with CSB-RA575353A0HU (red line) at 1:50. The cells were incubated in 10% normal goat serum to block non-specific protein-protein interactions followedby the antibody (1 $\mu$ g/1\*106cells) for 1 h at 4°C.The secondary antibody used was FITCconjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4°C. Control antibody (green line) was Rabbit IgG (1 $\mu$ g/1\*106cells) used under the same conditions. Acquisition of >10,000 events was performed.

## Description

The recombinant LDLR antibody is a monoclonal antibody molecule expressed by using recombinant DNA and protein engineering technology to clone the genes encoding the LDLR antibody into a plasma vector and then by transfecting the vector clone into the appropriate recipient mammalian cells for production. It was purified using affinity-chromatography. And it shows reactivity with LDLR protein from Human. This recombinant LDLR antibody can be used in the ELISA, IHC, IF, FC.

LDLR is a cell membrane glycoprotein responsible for the binding and internalization of circulating cholesterol-containing lipoprotein particles. LDLR-mediated endocytosis plays an essential role in cholesterol transport and lipoprotein & lipid metabolism. Overexpression of LDLR promotes rapid uptake of LDL cholesterol thus leading to the accumulation of lipid components including cholesterol, free fatty acids, and triglycerides. It has been shown that LDLR is upregulated in several human malignancies to facilitate cell proliferation, enhance cholesterol uptake, and activate the nuclear  $\beta$ -catenin activity of cancer cells.