

Rabbit Anti-LDLR antibody

SL0705R

Product Name	LDLR
Chinese Name	低密度 Lipoprotein 受体抗体
Alias	LDLR_HUMAN; Low-density lipoprotein receptor; LDL receptor; FH; FHC; FHCL1; LDLCQ2; low density lipoprotein receptor;
Research Area	Tumour immunology
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, (predicted: Rat, Dog, Pig, Cow, Horse, Rabbit, Guinea Pig,) WB=1:500-2000,ICC/IF=1:100-500,Flow-Cyt=1µg/Test
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	92kDa
Cellular localization	cytoplasmic The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human LDL-R: 781-860/860 <Cytoplasmic>
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product	The low density lipoprotein receptor (LDLR) gene family consists of cell surface proteins

Detail

involved in receptor-mediated endocytosis of specific ligands. The encoded protein is normally bound at the cell membrane, where it binds low density lipoprotein/cholesterol and is taken into the cell. Lysosomes release the cholesterol, which is made available for repression of microsomal enzyme 3-hydroxy-3-methylglutaryl coenzyme A (HMG CoA) reductase, the rate-limiting step in cholesterol synthesis. At the same time, a reciprocal stimulation of cholesterol ester synthesis takes place. Mutations in this gene cause the autosomal dominant disorder, familial hypercholesterolemia. Alternate splicing results in multiple transcript variants.[provided by RefSeq, May 2022]

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.

Subunit:

Interacts with LDLRAP1. Interacts with SNX17. Interacts with HCV E1/E2 heterodimer. Interacts with HIV-1 Tat.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Endomembrane system; Single-pass type I membrane protein. Membrane, clathrin-coated pit; Single-pass type I membrane protein. Note=Found distributed from the plasma membrane to intracellular compartments.

Tissue Specificity:

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.

Post-translational modifications:

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

Similarity:

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

SWISS:

P01130

Gene ID:

3949

Database links:

[Entrez Gene: 3949](#) Human

[Entrez Gene: 16835](#) Mouse

[Entrez Gene: 300438](#) Rat

[Omim: 606945](#) Human

[SwissProt: P01130](#) Human

[SwissProt: P35951](#) Mouse

[SwissProt: P35952](#) Rat

[Unigene: 213289](#) Human

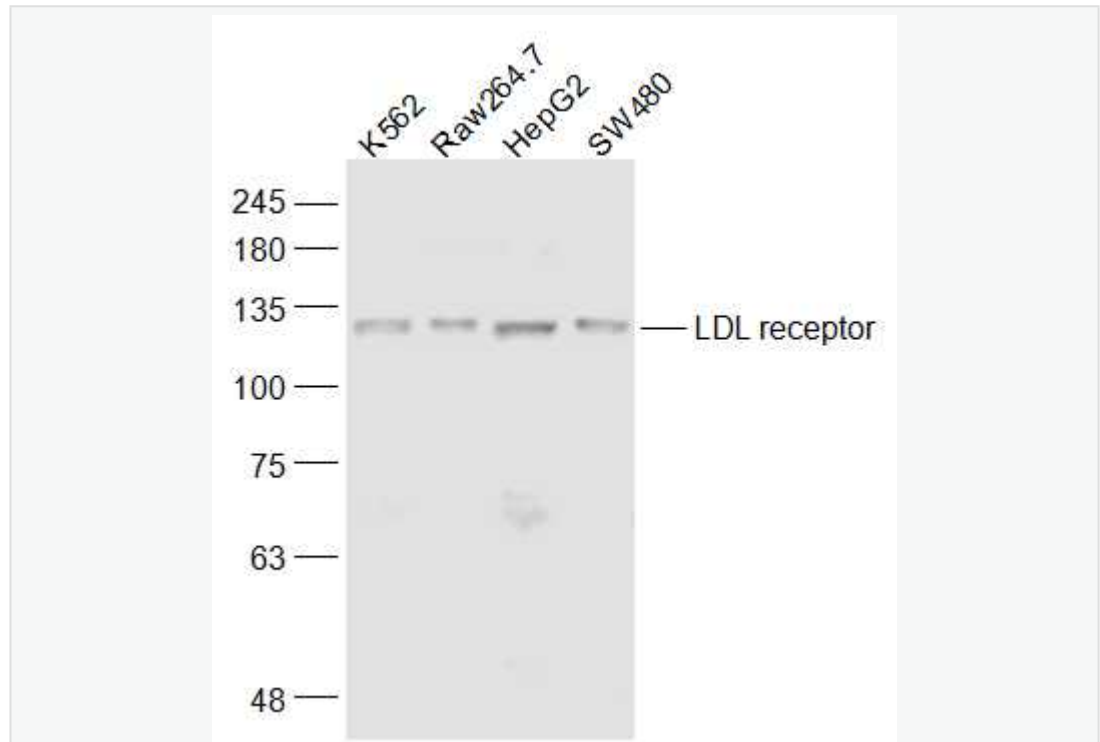
[Unigene: 728190](#) Human

[Unigene: 3213](#) Mouse

[Unigene: 10483](#) Rat

低密度 Lipoprotein 受体 LDLR 是一种存在于细胞表面的、可识别多种配体的 Lipoprotein 受体，在体内对于富含甘油三酯的 Lipoprotein 代谢非常重要；LDL R 目前主要用于代谢及 Tumour 方面的研究。

**Product
Picture**



Sample:

K562(Human) Cell Lysate at 30 ug

Raw264.7(Mouse) Cell Lysate at 30 ug

HepG2(Human) Cell Lysate at 30 ug

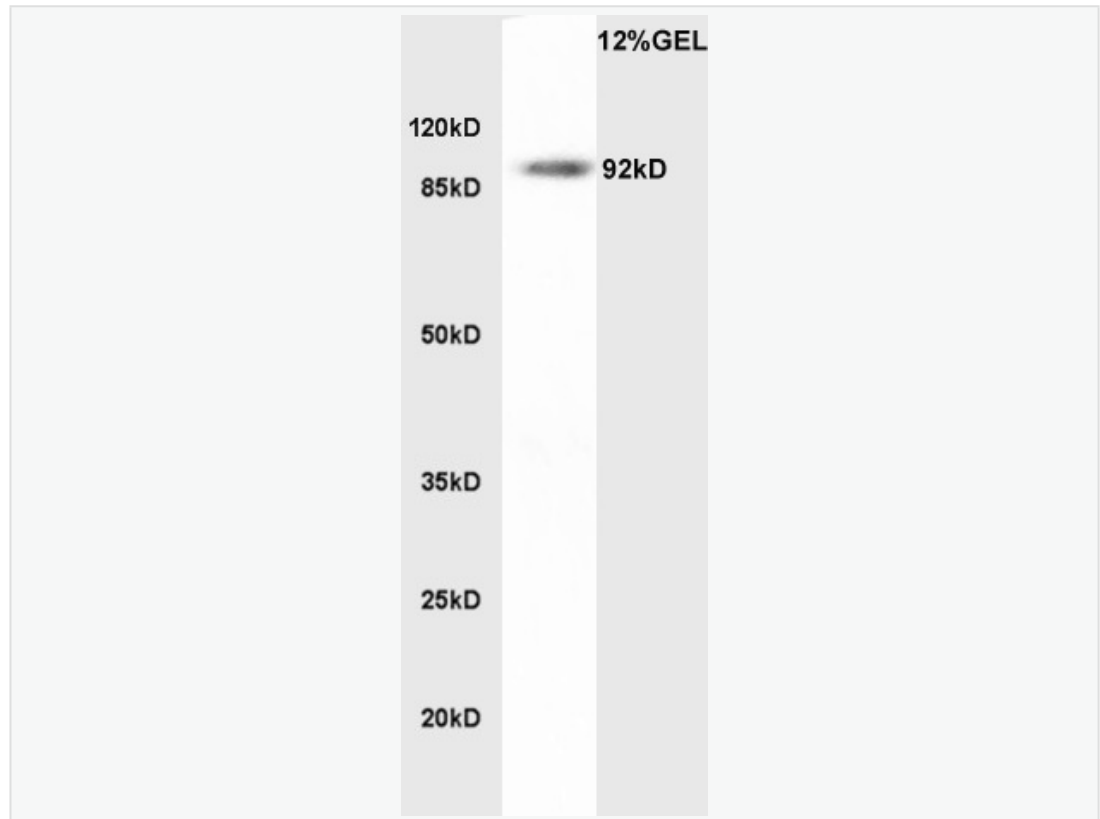
SW480(Human) Cell Lysate at 30 ug

Primary: Anti-LDL receptor (SL0705R) at 1/1000 dilution

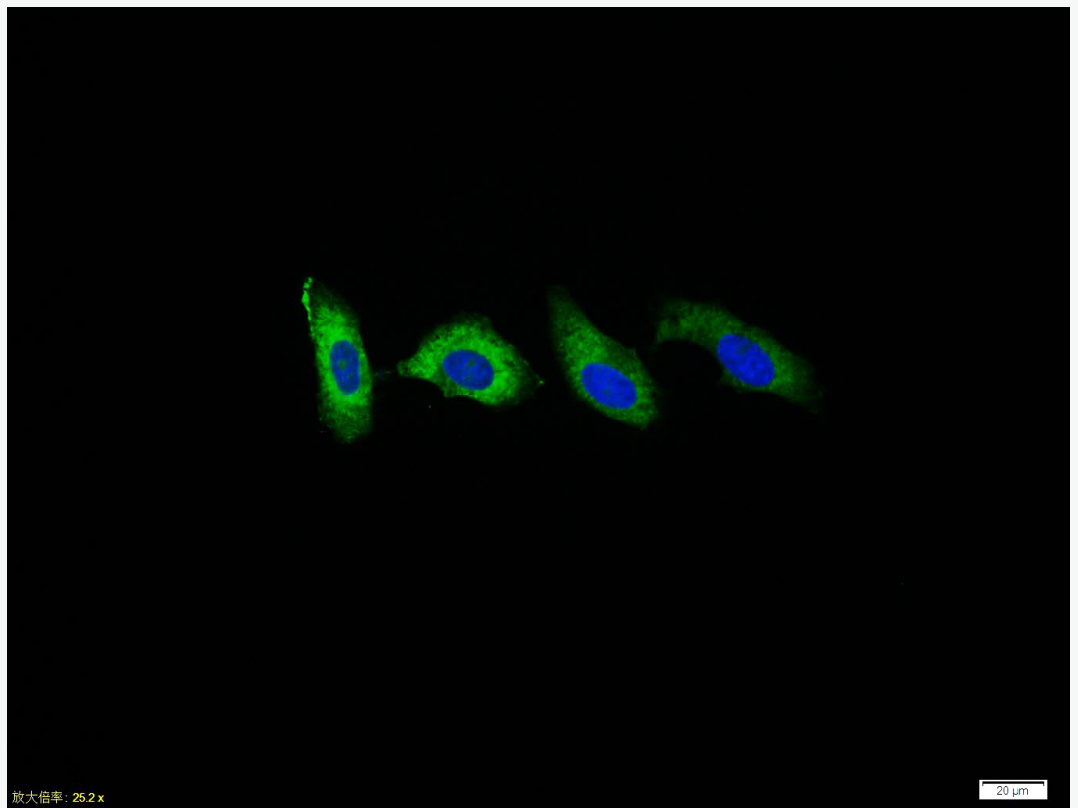
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 92 kD

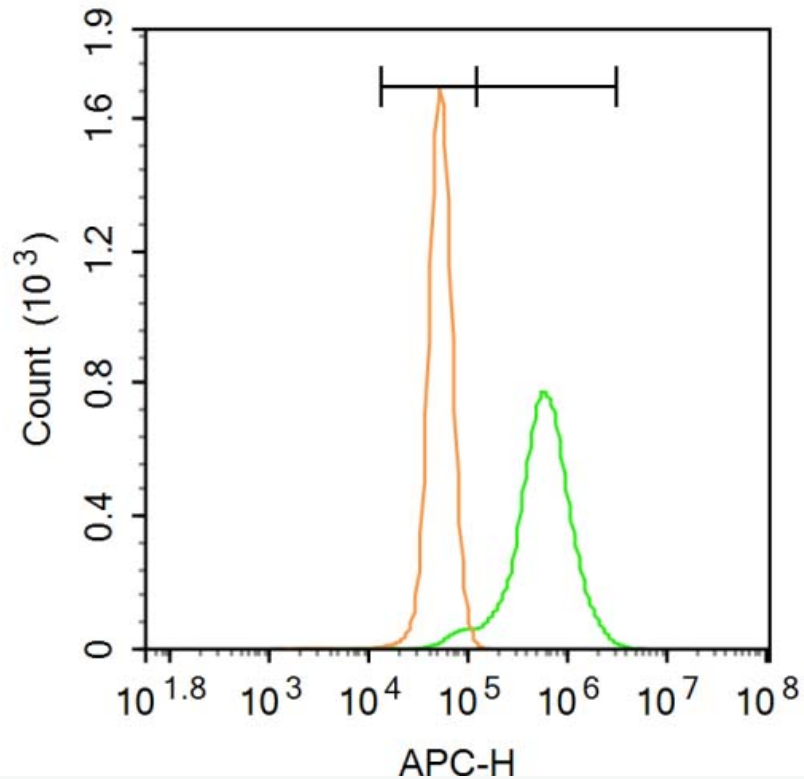
Observed band size: 120 kD



Sample:Human colon Lysate at 45ug; Primary: Anti-LDL receptor (SL0705R) at 1:300 dilution; Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0295G-HRP) at 1: 5000 dilution; Predicted band size : 92kD Observed band size : 92kD



HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (LDL receptor) polyclonal Antibody, Unconjugated (SL0705R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control: A431.

Primary Antibody (green line): Rabbit Anti-LDL receptor antibody (SL0705R), Dilution: $1\mu\text{g} / 10^6$ cells.

Isotype Control Antibody (orange line): Rabbit IgG.

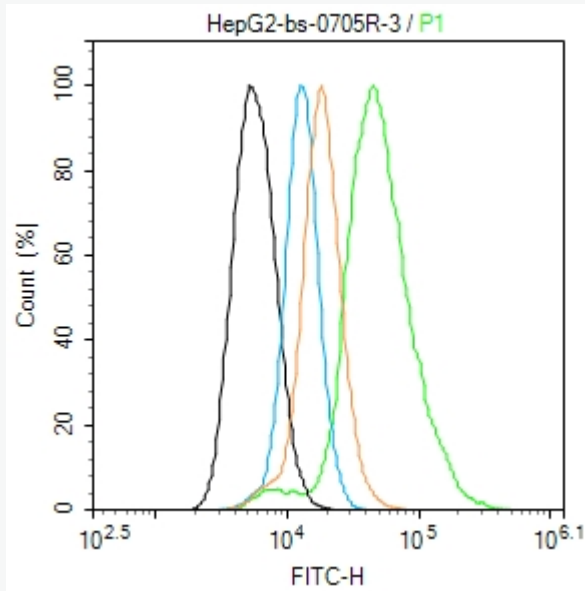
Secondary Antibody: Goat anti-rabbit IgG-AF647, Dilution: $1\mu\text{g} / \text{test}$.

Protocol

A431 cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room

temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.

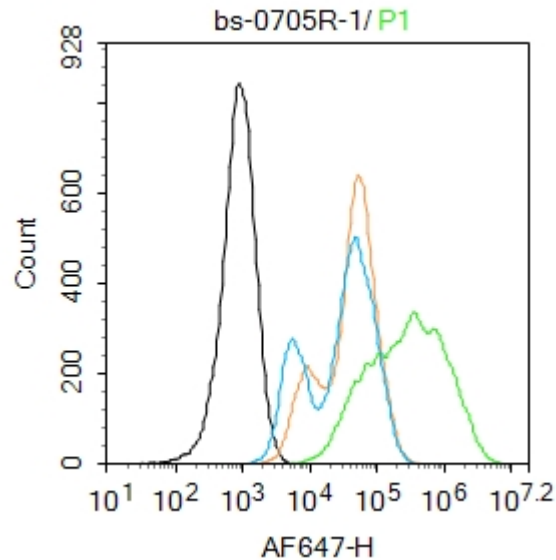


Blank control (black line): HepG2 (black) (The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with PBST for 30 min on room temperature)

Primary Antibody (green line): Rabbit Anti-LDLreceptor antibody (SL0705R) ;
Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC;Dilution: 1 μ g /test.



Blank control: Raw264.7.

Primary Antibody (green line): Rabbit Anti-LDL receptor antibody (SL0705R)

Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.



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