

## LDL-R Antibody

*LDL-R: Low density lipoprotein receptor, LDLR, FH, FHC, LDLCQ2*

**CATALOG No.: 5163**

### BACKGROUND:

The low density lipoprotein receptor (LDL-R) gene family consists of cell surface proteins involved in receptor-mediated endocytosis of specific ligands. Low density lipoprotein (LDL) is normally bound at the cell membrane and taken into the cell ending up in lysosomes where the protein is degraded and the cholesterol 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 (reviewed in 1). Mutations in the LDL-R gene cause the autosomal dominant disorder, familial hypercholesterolemia (2). Along with SCARB1, CLDN1, and the tetraspanin superfamily member CD81, LDL-R has been reported to be an entry factor for the Hepatitis C virus (3). At least three isoforms of LDL-R are known to exist.

### SOURCE:

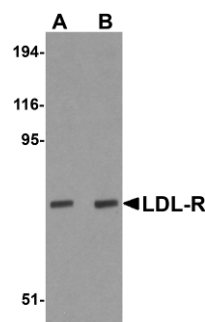
Chicken polyclonal LDL-R antibody was raised against an 18 amino acid peptide near the center of human LDL-R (GenBank accession no. NP\_000518).

### LDL-RLICATION:

LDL-R antibody can be used for detection of LDL-R by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Human liver tissue lysate can be used as positive control. LDL-R antibody is human, mouse and rat reactive. **For research use only.**

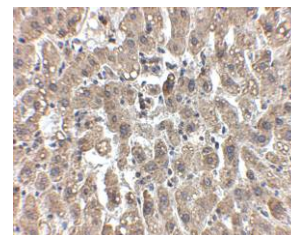
### STORAGE:

LDL-R antibody is supplied as immunoaffinity purified IgY in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of LDL-R in human liver tissue lysate with LDL-R antibody at (A) 1 and (B) 2 µg/ml.

Immunohistochemistry of LDL-R in human liver tissue with LDL-R antibody at 2.5 µg/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **5163P**.  
Human Liver Tissue Lysate, Catalog No. **1304**.  
CLDN1 Antibody, Catalog No. **5187**.  
SCARB1 Antibody, Catalog No. **5193**.  
CD81 Antibody, Catalog No. **5195**.

### REFERENCES:

1. Li Y, Cam J, and Bu G. Low-density lipoprotein receptor family: endocytosis and signal transduction. *Mol. Neurobiol.* 2001; 23:53-67.
2. Austin MA, Hutter CM, Zimmern RL, et al. Familial hypercholesterolemia and coronary heart disease: a HuGE association review. *Am. J. Epidemiol.* 2004; 160:421-9.
3. Helle F and Dubuisson J. Hepatitis C virus entry into host cells. *Cell Mol. Life Sci.* 2008; 65:100-12. (09-01D)