

PRODUCT INFORMATION



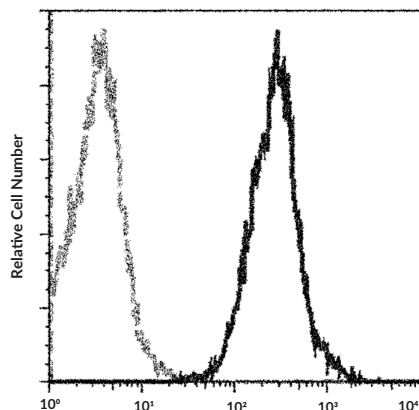
LDL Receptor Rabbit Monoclonal Antibody (APC) (Clone 301)

Item No. 38075

Overview and Properties

| | |
|----------------------------|---|
| Contents: | This vial contains protein A-affinity purified recombinant monoclonal antibody. |
| Synonyms: | LDLR, Low Density Lipoprotein Receptor |
| Immunogen: | Recombinant human LDLR |
| Cross Reactivity: | (+) LDLR |
| Species Reactivity: | (+) Human |
| Form: | Liquid |
| Storage: | 2-8°C (as supplied) |
| Stability: | ≥1 year |
| Storage Buffer: | PBS solution with 0.5% BSA and 0.03% ProClin™ 300 |
| Clone: | 301 |
| Host: | Rabbit |
| Isotype: | IgG |
| Application: | Flow cytometry (FC); the optimal working concentration/dilution should be determined empirically. |

Image



LDL Receptor Rabbit Monoclonal Antibody (APC) (Clone 301)
with isotype control

Profile of LDL Receptor Rabbit Monoclonal Antibody (APC) (Clone 301) reactivity on A431 cells analyzed by flow cytometry.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM

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Description

LDL receptor (LDLR) is a cell surface glycoprotein that scavenges LDL from the blood and regulates plasma LDL levels.¹ It is composed of an N-terminal signal sequence, a ligand-binding domain, an EGF precursor homology domain, an O-linked glycosylation domain, a transmembrane region, and a C-terminal cytoplasmic tail. LDLR is primarily expressed in the liver but is also found in the adrenal cortex.² It mediates the endocytosis of LDL by binding to apolipoprotein E (ApoE) or ApoB on the LDL surface, thereby supplying cholesterol to cells.¹ Protein levels of LDLR are decreased in HepG2 cells expressing proprotein convertase subtilisin kexin 9 (PCSK9).³ Knockout of *Ldlr* increases plasma levels of cholesterol and triglycerides and induces the formation of atherosclerotic lesions in mice.⁴ Mutations in *LDLR* are associated with familial hypercholesterolemia.⁵ Cayman's LDL Receptor Rabbit Monoclonal Antibody (APC) (Clone 301) is composed of an LDLR monoclonal antibody conjugated to allophycocyanin (APC) and can be used for flow cytometry (FC).

References

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3. Benjannet, S., Rhainds, D., Essalmani, R., *et al.* NARC-1/PCSK9 and its natural mutants. Zymogen cleavage and effects on the low density lipoprotein (LDL) receptor and LDL cholesterol. *J. Biol. Chem.* **279(47)**, 48865-48875 (2004).
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5. Austin, M.A., Hutter, C.M., Zimmern, R.L., *et al.* Genetic causes of monogenic heterozygous familial hypercholesterolemia: A HuGE prevalence review. *Am. J. Epidemiol.* **160(5)**, 407-420 (2004).

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1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
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FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM