PRODUCT INFORMATION

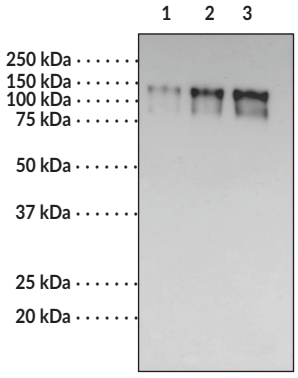
LDL Receptor Polyclonal Antibody - Biotinylated

Item No. 22727

Overview and Properties

Contents:	This vial contains 50 µg of biotinylated IgG.
Synonyms:	LDLR, Low Density Lipoprotein Receptor
Immunogen:	Synthetic peptide from the C-terminal region of mouse LDLR
Species Reactivity:	(+) Human, mouse, and rat
Cross Reactivity:	(+) LDLR
Uniprot No.:	P35951 (murine)
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, pH 7.2, 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
MW:	~100-160 kDa
Applications:	Immunocytochemistry (ICC) and Western blot (WB); the recommended starting dilution is 1:250-500. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: rLDLR (50 ng)
Lane 2: rLDLR (100 ng)
Lane 3: rLDLR (150 ng)

WB detection of recombinant LDLR by LDL Receptor Polyclonal Antibody – Biotinylated (0.5 µg/ml)

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.[5] Mutations in *LDLR* are associated with familial hypercholesterolemia.[4] Cayman's LDL Receptor Polyclonal Antibody - Biotinylated is composed of an LDLR polyclonal antibody conjugated to biotin and can be used for immunocytochemistry (ICC) and Western blot (WB) applications. This antibody recognizes LDLR at approximately 100 to 160 kDa from human, mouse, and rat samples.

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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