Anti-VLDL Receptor Antibody

ER1918-54

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell
Molecular Wt:	93 KDa

Description: Binds VLDL and transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. Binding to Reelin induces tyrosine phosphorylation of Dab1 and modulation of Tau phosphorylation (By similarity). VLDLR is a peripheral lipoprotein receptor that functions in lipoprotein metabolism, cardiac fatty acid metabolism, and fat deposition. In effect, VLDLR will allow cholesterol to reach tissues from the bloodstream, where it may be used in cellular membranes. In addition, it will allow fatty acids to get into cells where they may be used as an energy source. Overall, VLDLR primarily modulates the extra-hepatic metabolism of triglyceride-rich lipoproteins. VLDLR only plays a discrete role in lipid metabolism, but is more significant in stressed situations. Mice with double knockouts in VLDLR and LDLR have higher serum triglyceride levels than those with only a knockout in the LDLR gene. In addition, LDLR knockout mice overexpressing VLDLR have decreased serum triglyceride levels. Although fat deposition is close to normal without VLDLR, its role gains importance when LDLR is deficient. Despite this knowledge on its role in lipoprotein uptake, the complete mechanism of lipid metabolism performed by VLDLR is not fully understood.

Immunogen: KLH conjugated synthetic peptide derived from human VLDL Receptor 551-650/873

Positive control: Abundant in heart and skeletal muscle; also ovary and kidney; not in liver.

Subcellular location: Membrane; Single-pass type I membrane protein. Membrane, clathrin-coated pit; Single-pass type I membrane protein.

Database links: SwissProt: P98155 Human

Recommended Dilutions:

WB	1:500-2000
IF-cell	1:100

Storage Buffer: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage Instruction: Store at -20℃ for one year. Avoid repeated freeze/thaw cycles.

Purity: Protein A affinity purified.

Images

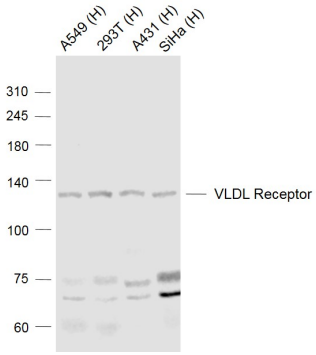

Fig1: Sample:
Lane 1: A549 (Human) Cell Lysate at 30 ug
Lane 2: 293T (Human) Cell Lysate at 30 ug
Lane 3: A431 (Human) Cell Lysate at 30 ug
Lane 4: SiHa (Human) Cell Lysate at 30 ug
Primary: Anti-VLDL Receptor (ER1918-54) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 120 kD
Observed band size: 120 kD

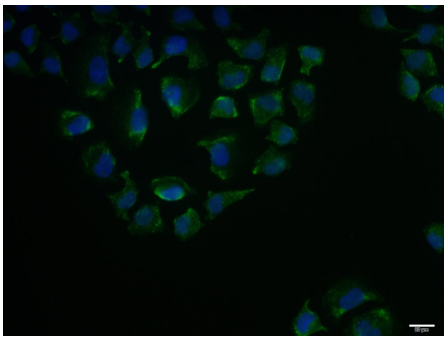

Fig2: Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (VLDL Receptor) polyclonal Antibody, Unconjugated (ER1918-54) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.