SANTA CRUZ BIOTECHNOLOGY, INC.

LDL (262-01): sc-57895

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Low density lipoprotein (LDL) represents a class of lipoprotein particles that functions to transport cholesterol and triglycerides from the liver and small intestine into cells and tissues. LDL is synthesized as Very LDL (VLDL) lipoproteins, which then lose triglyceride because of the action of lipoprotein lipase (LPL), and become smaller and denser with a higher proportion of cholesterol. When a cell requires cholesterol, it synthesizes the necessary LDL receptors (LDLRs), which include LDLR, LRP, Megalin, VLDLR and ApoER2. The LDL receptor is a cell surface transmembrane protein that mediates the uptake of LDL and its degradation in the lysosome, which provides cholesterol to cells. The cytoplasmic domain of the LDL receptor is necessary for the receptor to cluster in Clathrin coated pits, which promotes the rapid endocytosis of bound LDL. Increased levels of LDL play a role in atherosclerosis, stroke and peripheral vascular disease and mutations in LDL receptors cause familial hypercholesterolemia, an autosomal dominant disease that causes premature coronary atherosclerosis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: APOB (human) mapping to 2p24.1.

SOURCE

LDL (262-01) is a mouse monoclonal antibody raised against purified plasma LDL oxidized wtih MDA of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LDL (262-01) is recommended for detection of MDA-oxidized LDL of human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with native LDL.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.