

apoO (F-19): sc-130033



The Power to Question

BACKGROUND

Apolipoproteins are a family of fatty-acid binding proteins that transport fat through the bloodstream in the form of lipoproteins. ApoO (apolipoprotein O), also known as FAM121B or MyO25, is a 198 amino acid single-pass membrane protein that belongs to the apolipoprotein family. Expressed ubiquitously with particularly high expression in diabetic heart tissue, apoO functions to promote the transport of cholesterol from macrophage cells and may be involved in regulatory mechanisms that protect lipid accumulation within the heart. ApoO is present in high density lipoproteins (HDLs) and low density lipoproteins (LDLs) and is secreted by an MTP (microsomal triglyceride transfer protein)-dependent mechanism. Two isoforms of apoO exist due to alternative splicing events.

REFERENCES

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2. van der Vliet, H.N., et al. 2001. Apolipoprotein A-V: a novel apolipoprotein associated with an early phase of liver regeneration. *J. Biol. Chem.* 276: 44512-44520.
3. Offer, T. and Samuni, A. 2002. Nitroxides inhibit peroxy radical-mediated DNA scission and enzyme inactivation. *Free Radic. Biol. Med.* 32: 872-881.
4. Nielsen, L.B. 2002. Lipoprotein production by the heart: a novel pathway of triglyceride export from cardiomyocytes. *Scand. J. Clin. Lab. Invest. Suppl.* 237: 35-40.
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CHROMOSOMAL LOCATION

Genetic locus: APOO (human) mapping to Xp22.11.

SOURCE

apoO (F-19) is a purified rabbit polyclonal antibody raised against apoO of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and <0.02% sucrose.

APPLICATIONS

apoO (F-19) is recommended for detection of apoO of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for apoO siRNA (h): sc-90923, apoO shRNA Plasmid (h): sc-90923-SH and apoO shRNA (h) Lentiviral Particles: sc-90923-V.

Molecular Weight of translated apoO: 22 kDa.

Molecular Weight of glycosylated apoO: 55 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

RESEARCH USE

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