Technical Data Sheet

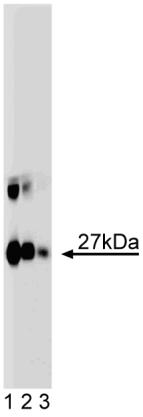
Purified Mouse Anti-ApoA-I

Product Information

Material Number:	**612330**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	4/ApoA-1
Immunogen:	Rat ApoA-I aa. 144-258
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Mouse
Target MW:	27 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

In blood, cholesterol and triglycerides are transported in lipoprotein particles that consist of a single layer of phospholipid surrounding a lipid core and surface-associated apolipoproteins (Apo). The Apo-proteins are involved in the specific binding of cellular receptors, the regulation of lipolytic enzymes, and the process of lipid exchange. High density lipoprotein particles (HDLs) contain the apolipoproteins ApoA-I, ApoA-II and Apo-M, whereas low density (LDL), intermediate density, and very low density (VLDL) lipoprotein particles contain ApoB-100 as the primary structural element. ApoA-I is synthesized in the liver and small intestines, where it acts as a cofactor for lecithin-cholesterol acyltransferase during the formation of cholesterol ester. ApoA-II is synthesized in the liver where it activates hepatic lipase. In HepG2 cells, treatment with gramoxone causes oxidative stress and reductions in ApoA-I mRNA levels. This down regulation of ApoA-I may contribute to reduced plasma HDL levels in response to oxidants, such as cigarette smoke. Thus, ApoA-I is an important cofactor fo cholesterol synthesis and is a major component of HDLs.



Western blot analysis of ApoA-I on a rat liver lysate.
Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti- ApoA-I antibody.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

Application Notes

Application

Western blot	Routinely Tested

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

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Suggested Companion Products

Catalog Number	Name	Size	Clone
611467	Rat Liver Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Cuthbert C, Wang Z, Zhang X, Tam SP. Regulation of human apolipoprotein A-I gene expression by gramoxone. *J Biol Chem.* 1997; 272(23):14954-14960. (Biology)

Poncin JE, Martial JA, Gielen JE. Cloning and structure analysis of the rat apolipoprotein A-I cDNA. *Eur J Biochem.* 1984; 140(3):493-498.(Biology)