

BM2577

Monoclonal Antibody to Apolipoprotein A I / APO AI - Purified

Alternate names:	APOA1, Apo-AI, ApoA-I, ApoAI
Quantity:	1 mg
Concentration:	3.47 mg/ml (OD280 nm, E1% = 14)
Background:	Apolipoprotein A I promotes cholesterol efflux from tissues to the liver for excretion. Apolipoprotein A I is the major protein component of high density lipoprotein (HDL) in the plasma. Synthesized in the liver and small intestine, it consists of two identical chains of 77 amino acids; an 18 amino acid signal peptide is removed co-translationally and a 6 amino acid propeptide is cleaved post-translationally. Apolipoprotein A I is a cofactor for lecithin cholesterolacyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. Defects in the Apolipoprotein A I gene are associated with HDL deficiency and Tangier disease. The therapeutic potential of apoA-I has been recently assessed in patients with acute coronary syndromes, using a recombinant form of a naturally occurring variant of apoA-I. The availability of recombinant normal apoA-I should facilitate further investigation into the potential usefulness of apoA-I in preventing atherosclerotic vascular diseases.
Uniprot ID:	P02647
NCBI:	NP_000030.1
GeneID:	335
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	1405
Immunogen:	Purified Human plasma Apo A-I
Format:	State: Liquid purified IgG fraction. Purification: Protein A Chromatography. Buffer System: PBS, pH 7.0 containing 0.02% Sodium Azide as preservative.
Applications:	Suitable for use in Competitive RIA or EIA. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Recognizes Apolipoprotein A1 (Apo AI). No cross reactivity with Apo A-II or Apo B. Species: Human. Other species not tested. Affinity Constant: 8 x 10 ^{e9}

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Jamil H, Gordon DA, Eustice DC, Brooks CM, Dickson JK, Chen Y, et al. An inhibitor of the microsomal triglyceride transfer protein inhibits apoB secretion from HepG2 cells. *Proc Natl Acad Sci U S A*. 1996 Oct 15;93(21):11991-5. PubMed PMID: 8876250.
2. Ishiguro H, Yoshida H, Major AS, Zhu T, Babaev VR, Linton MF, et al. Retrovirus-mediated expression of apolipoprotein A-I in the macrophage protects against atherosclerosis in vivo. *J Biol Chem*. 2001 Sep 28;276(39):36742-8. Epub 2001 Jul 26. PubMed PMID: 11477092.