

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ABCA1 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 768510
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human ABCA1 Phe1248-Gln1350 Accession # O95477
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	HepG2 human hepatocellular carcinoma cell line fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005)

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

ABCA1 (ATP-binding cassette, subfamily A member 1; also cholesterol efflux regulatory protein) is a 240-280 kDa member of the ABCA family, ABC transporter superfamily of molecules. It is widely expressed, particularly by macrophages, where it participates in the transport of lipid across cell membranes. Once transported, it is passed on to tethered apoA-I to form HDL. Human ABCA1 is 2261 amino acids (aa) in length. It has up to 15 transmembrane segments with beginning and ending cytoplasmic domains and a large cytoplasmic central region. ABC transporters are found between aa 899-1311 and 1912-2144. Amino acids 2216-2221 are essential for lipid transport, and two intramolecular disulfide bonds are required for activity (Cys75-Cys309 and Cys1463/1465-Cys1477). There are three potential isoform variants. One possesses an alternative start site at Met61, while two others contain 12 aa and 123 aa substitutions for aa 241-2261, respectively. Over aa 1248-1350, human ABCA1 shares 97% aa identity with mouse ABCA1.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.