

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse and rat Apolipoprotein H/ApoH in Western blots and detects recombinant mouse Apolipoprotein H/ApoH in direct ELISAs. In direct ELISAs, approximately 40% cross-reactivity with recombinant human Apolipoprotein H/ApoH is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Apolipoprotein H/ApoH Gly20-Cys345 Accession # Q01339
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

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. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Apolipoprotein H (ApoH), also known as β 2-Glycoprotein I/ β 2-GPI, is a variably glycosylated member of the complement control superfamily of proteins with a molecular weight of approximately 50 kDa (1, 2). Mature mouse ApoH consists of four tandem Sushi/SCR repeats followed by one Sushi-like repeat (3, 4). Mature mouse ApoH shares 76% and 42% aa sequence identity with human and rat ApoH, respectively. Hepatocyte-derived ApoH binds directly to negatively charged phospholipids (5). It circulates as a component of lipoprotein particles and as a lipid-free serum protein (6). ApoH also associates with liposomes and apoptotic cell debris, thereby enabling their renal clearance via Megalin uptake (7, 8). Circulating levels of ApoH are positively correlated with triglyceride-rich lipoprotein (VLDL) components in type II diabetes (9). ApoH inhibits thrombosis by blocking the activation of Coagulation Factor XI but also shows procoagulant activity by inhibiting the activation of Protein C (10, 11). ApoH can be cleaved by Plasmin at Lys317-Thr318, an action that is enhanced by heparin (12, 13). ApoH cleavage reduces its ability to bind phospholipids and inhibit Factor XI activation but confers the ability to bind Plasminogen (10, 12, 14). Cleaved ApoH also demonstrates antiangiogenic activity, whereas intact ApoH does not (14). The production of antibodies against ApoH is a hallmark of Antiphospholipid Syndrome (APS), an autoimmune disorder that leads to hypercoagulability and recurrent miscarriages (15). ApoH binds to the surface antigen of Hepatitis B Virus and is associated with the development of HBV-induced hepatocellular carcinoma (6, 16).

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.