Human Lipoprotein Lipase/LPL Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 1012307

Catalog Number: FAB7197S

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Lipoprotein Lipase/LPL in direct ELISAs.
Source	Monoclonal Mouse IgG_{2B} Clone # 1012307
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese Hamster Ovary cell line CHO-derived human Lipoprotein Lipase/LPL protein Ala28-Gly475 Accession # P06858
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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.*

Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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

Lipoprotein Lipase (LPL) is a rate-limiting enzyme responsible for the hydrolysis of triglycerides (1). LPL forms a non-covalent active homodimeric molecule (2). Monomeric LPL contains an N-terminal domain with the catalytic triad responsible for lipolysis and a 22-amino acid loop that serves as a cover for the catalytic site (3) in addition to a C-terminal domain that contains the region required for dimerization (4) as well as the primary heparin-binding domain that is important for lipoprotein binding. LPL is expressed in many tissues (5, 6) where it is synthesized in the ER of parenchymal cells and secreted to capillaries. LPL is highly controlled by regulatory factors such as apolipoproteins, angiopoietins, and hormones (7). LPL can be produced by macrophages and this expression is a critical event in the pathogenesis of atherosclerosis (8) in addition to contributing to the macrophage inflammatory response (9). Variants of LPL have been associated with altered risk of several diseases including coronary heart disease (10, 11), cerebrovascular accidents (12, 13) and Alzheimer's disease (14) and can result in LPL deficiency and consequent hyperlipidemia (15). LPL expression is a prognostic marker in B cell chronic lymphocytic leukemia (16) and has been linked to solid tumor cell proliferation (17). As LPL plays a critical role in several diseases, it is a therapeutic target for both inhibition (18) and induction (19). The LPL enzyme activity can be inhibited by Recombinant Mouse ANGPTL3.

PRODUCT SPECIFIC NOTICES

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