

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse LRPAP in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human LRPAP is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse LRPAP Gln29-Leu360 Accession # P55302
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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

LRPAP (LDL receptor-related protein-associated protein 1; also named RAP) is a ubiquitously expressed 39 kDa molecular chaperone for LDL receptor family proteins (1, 2). Mature mouse LRPAP is 332 amino acids (aa) in length and secreted into the ER/Golgi of the cell. It shares 77% and 97% aa sequence identity with human and rat LRPAP, respectively. LRPAP contains three approximately 100 aa α -helical domains (D1-D3). The D1 domain contains a low affinity binding site for LRP, and the associated D2 and D3 domains bind LRP with high affinity (4). Domains D2 and D3 interact with each other, while D1 is independent (3). The majority of LRPAP is localized in the endoplasmic reticulum and Golgi (5). LRPAP prevents the premature interaction of LRP, LRP2/megalin, and VLDLR with their co-expressed ligands, thereby promoting proper receptor folding and export from the ER (6-8). Protonation of conserved histidine residues within the D3 domain induces the separation of LRPAP and LRP in the relatively acidic Golgi (9). LRPAP, which contains a C-terminal HNEL motif, can then recycle to the ER (9). A minor amount of LRPAP remains associated with LRP and can modulate receptor activity on the cell surface (5). Exogenously applied LRPAP competitively inhibits LDL receptor family binding and uptake of activated α 2-macroglobulin, apoB100- or apoE-enriched LDL and VLDL particles, cholesteryl esters, and complexes of PAI-1 with either tPA or uPA (10-14).

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.