

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LRP-1 Cluster II in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LRP-1 Cluster II Arg786-Leu1165 Accession # Q07954
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.

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

LDL receptor-related protein 1 (LRP-1), also known as CD91 and the α 2-macroglobulin receptor, is a type I transmembrane protein in the LDL receptor superfamily. It is expressed on neurons, hepatocytes, adipocytes, vascular smooth muscle cells, fibroblasts, keratinocytes, macrophages, and megakaryocytes. LRP-1 is important for the clearance of a large number of circulating molecules involved in fatty acid metabolism and the inhibition of serine proteases (1-4). LRP-1 also associates, or through intracellular scaffold proteins, with other membrane associated proteins on the same cell. This allows LRP-1 to modulate the activity or internalization of PDGF R β , NMDA receptor subunits, TGF- β receptors, Frizzled-1, various integrins, and the prion protein PrP^C (1, 5-10). Human LRP-1 is N glycosylated and sialylated, and cleaved in the Golgi to produce an 85 kDa transmembrane beta chain, and a 515 kDa alpha chain. Both associate noncovalently, with the beta chain remaining completely extracellular (11, 12). The alpha chain of LRP 1 contains 31 LDLR class A repeats, 34 LDLR class B repeats, and 22 EGF-like repeats (13). The LDLR domains are clustered in four regions throughout the protein (13). Cluster II (aa 786 - 1165) contains one EGF-like and eight LDLR class A repeats (14, 15). Cluster II contains binding sites for Apolipoprotein E, LPL, LRPAP/RAP, alpha 2 Macroglobulin, Coagulation Factor VIII light chain, Lactoferrin, PAI-1, tPA-PAI-1 complexes, Pro-uPA, and TFPI (14, 15). Within this region, human LRP-1 shares 99% aa sequence identity with mouse and rat LRP-1. A shed soluble form of LRP-1 circulates in the serum and retains ligand binding properties (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.