

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 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

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