

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LRP-1 Cluster III in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived human LRP-1 Cluster III Ser2522-Ile2941 Accession # Q07954
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.

Immunocytochemistry 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 α2-macroglobulin receptor, is a type I membrane 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 complexes of serine proteases with their inhibitors (1-4). LRP-1 also associates directly 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 Rβ, NMDA receptor subunits, TGF-β receptors, Frizzled-1, various integrins, and the prion protein PrP^C (1, 5-10). Human LRP-1 is an N-glycosylated and sialylated molecule that is cleaved in the Golgi to produce an 85 kDa transmembrane β chain and a 515 kDa α chain that associates noncovalently with the β chain but does not itself cross the membrane (11, 12). The α 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). LRP-1 Cluster III (aa 2522-2941) contains ten LDLR-A cysteine-rich domains (14). Within this region, human LRP-1 shares 97% aa sequence identity with mouse and rat LRP-1. A soluble form of LRP-1 is shed into the serum and cerebrospinal fluid and retains ligand binding properties (15, 16). LRP-1 Cluster III contains binding sites for LRPAP/RAP (14).

PRODUCT SPECIFIC NOTICES

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