

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LRP-6 when phosphorylated at S1490 in Western blots.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide containing the human LRP-6 S1490 site.
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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

LRP6 (Low-density lipoprotein receptor-related protein 6) is a 200-210 kDa member of the LDLR family of proteins. It is widely expressed, and serves as a coreceptor for both Wnt and parathyroid hormone. In the Wnt system, LRP6 associates with select Fzd multipass receptors; in the PTH system, LRP6 complexes with PTHR1. Mature human LRP6 is a 1594 amino acid (aa) type I transmembrane glycoprotein. It contains a 1351 aa extracellular region (aa 20-1370) plus a 220 aa cytoplasmic domain (aa 1394-1613). The cytoplasmic domain contains two palmitoylation sites, one ubiquitination residue, and multiple phosphorylation motifs. Ser1490 is a key residue that impacts multiple activities. It undergoes both constitutive and receptor activation-induced phosphorylation. At least three enzymes likely act at this site, including PKA (associated with PTHR1), GSK-3 (associated with Fzd) and Cyclin Y/PFTK1 (associated with G2/M of the cell cycle). In general, Ser1490 phosphorylation results in β-catenin stabilization, followed by either gene transcription or β-catenin binding to centrosomes.

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.