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Phospho-LRP6 (S1490) Antibody

Rabbit mAb
Catalog # AP93146

Product Information

Application	WB
Primary Accession	O75581
Reactivity	Human
Clonality	Monoclonal
Other Names	Low-density lipoprotein receptor-related protein 7;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	180429

Additional Information

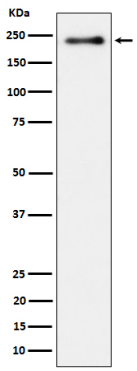
Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Phospho-LRP6 (S1490)
Description	Acts as a coreceptor with members of the frizzled family of seven-transmembrane spanning receptors to transduce signal by Wnt proteins (PubMed:11336703, PubMed:11448771, PubMed:15778503, PubMed:11719191, PubMed:15908424, PubMed:16252235).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	LRP6
Function	Component of the Wnt-Fzd-LRP5-LRP6 complex that triggers beta-catenin signaling through inducing aggregation of receptor-ligand complexes into ribosome-sized signalosomes (PubMed:11357136, PubMed:11448771, PubMed:15778503, PubMed:16341017, PubMed:16513652, PubMed:17326769, PubMed:17400545, PubMed:19107203, PubMed:19293931, PubMed:19801552, PubMed:28341812, PubMed:34896607). Cell-surface coreceptor of Wnt/beta-catenin signaling, which plays a pivotal role in various processes including retinal angiogenesis and bone formation (PubMed:11357136, PubMed:11448771, PubMed:15778503, PubMed:16341017, PubMed:16513652, PubMed:17326769, PubMed:17400545, PubMed:19107203, PubMed:19293931, PubMed:19801552, PubMed:28341812, PubMed:34896607). The Wnt-induced Fzd/LRP6 coreceptor complex recruits DVL1 polymers to the plasma membrane which, in turn, recruits the AXIN1/GSK3B-complex to the cell surface promoting the formation of

	signalosomes and inhibiting AXIN1/GSK3-mediated phosphorylation and destruction of beta-catenin (PubMed:16513652). Required for posterior patterning of the epiblast during gastrulation (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum. Membrane raft. Note=On Wnt signaling, undergoes a cycle of caveolin- or clathrin-mediated endocytosis and plasma membrane location. Released from the endoplasmic reticulum on palmitoylation Mono-ubiquitination retains it in the endoplasmic reticulum in the absence of palmitoylation. On Wnt signaling, phosphorylated, aggregates and colocalizes with AXIN1 and GSK3B at the plasma membrane in LRP6- signalosomes (By similarity). Chaperoned to the plasma membrane by HSP90B1 and MESD (PubMed:23572575). {ECO:0000250|UniProtKB:O88572, ECO:0000269|PubMed:23572575}
Tissue Location	Widely coexpressed with LRP5 during embryogenesis and in adult tissues

Images



Western blot analysis of Phospho-LRP6 (S1490) expression in heLa treated with Calyculin cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.