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LRP6 Rabbit mAb

Catalog # AP78525

Product Information

Application	WB
Primary Accession	O75581
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Chromatography
Calculated MW	180429

Additional Information

Gene ID	4040
Other Names	LRP6
Dilution	WB~~1:1000
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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

Background

Component of the Wnt-Fzd-LRP5-LRP6 complex that triggers beta-catenin signaling through inducing aggregation of receptor-ligand complexes into ribosome-sized signalsomes. Cell-surface coreceptor of Wnt/beta-catenin signaling, which plays a pivotal role in bone formation.

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