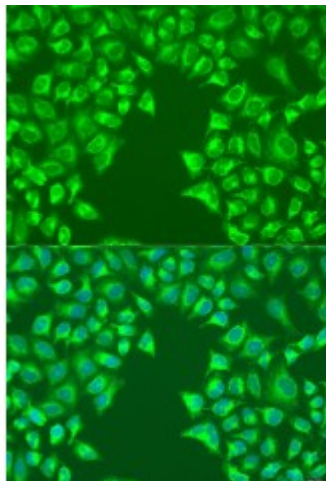


Anti-LRP6 Antibody



Description

This gene encodes a member of the low density lipoprotein (LDL) receptor gene family. LDL receptors are transmembrane cell surface proteins involved in receptor-mediated endocytosis of lipoprotein and protein ligands. The protein encoded by this gene functions as a receptor or, with Frizzled, a co-receptor for Wnt and thereby transmits the canonical Wnt/beta-catenin signaling cascade. Through its interaction with the Wnt/beta-catenin signaling cascade this gene plays a role in the regulation of cell differentiation, proliferation, and migration and the development of many cancer types. This protein undergoes gamma-secretase dependent RIP- (regulated intramembrane proteolysis) processing but the precise locations of the cleavage sites have not been determined.

Model	STJ117264
Host	Rabbit
Reactivity	Human
Applications	IF
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 20-150 of human LRP6 (NP_002327.2).
Gene ID	4040
Gene Symbol	LRP6
Dilution range	IF 1:50 - 1:200
Tissue Specificity	Widely coexpressed with LRP5 during embryogenesis and in adult tissues
Purification	Affinity purification

Note	For Research Use Only (RUO).
Protein Name	Low-density lipoprotein receptor-related protein 6 LRP-6
Molecular Weight	180.429 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:6698 OMIM:603507 Reactome:R-HSA-201681
Alternative Names	Low-density lipoprotein receptor-related protein 6 LRP-6
Function	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, 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 signalsomes and inhibiting AXIN1/GSK3-mediated phosphorylation and destruction of beta-catenin, Required for posterior patterning of the epiblast during gastrulation ,
Cellular Localization	Cell membrane,
Post-translational Modifications	Dual phosphorylation of cytoplasmic PPPSP motifs sequentially by GSK3 and CK1 is required for AXIN1-binding, and subsequent stabilization and activation of beta-catenin via preventing GSK3-mediated phosphorylation of beta-catenin, Phosphorylated, in vitro, by GRK5/6 within and outside the PPPSP motifs, Phosphorylation at Ser-1490 by CDK14 during G2/M phase leads to regulation of the Wnt signaling pathway during the cell cycle, Phosphorylation by GSK3B is induced by RPSO1 binding and inhibited by DKK1, Phosphorylated, in vitro, by casein kinase I on Thr-1479,