



LRP6 Monoclonal Antibody

Catalog No	YP-mAb-04925
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	LRP6
Immunogen	Synthesized peptide derived from human protein . at AA range: 1420-1500
Specificity	LRP6 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ADCAD2;STHAG7;LRP6;Low-density lipoprotein receptor-related protein 6 (LRP-6)
Observed Band	177kD
Calculated Molecular Weight	177kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein. Endoplasmic reticulum . Membrane raft . 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-signalsomes. Chaperoned to the plasma membrane by MESD (By similarity). .
Tissue Specificity	Widely coexpressed with LRP5 during embryogenesis and in adult tissues.
Function	disease:Defects in LRP6 are the cause of autosomal dominant coronary artery disease type 2 (ADCAD2) [MIM:610947].,domain:The YWTD-EGF-like domains 1 and 2 are required for the interaction with Wnt-frizzled complex. The YWTD-EGF-like domains 3 and 4 are required for the interaction with DKK1.,function:Essential for the Wnt/beta catenin signaling pathway, probably by acting



as a coreceptor together with Frizzled for Wnt. Specific high-affinity receptor for DKK1 and DKK2, but not DKK3. The interaction with DKK1 blocks LRP6-mediated Wnt/beta catenin signaling via LRP6 removal via Kremen proteins-mediated endocytosis.,similarity:Belongs to the LDLR family.,similarity:Contains 20 LDL-receptor class B repeats.,similarity:Contains 3 LDL-receptor class A domains.,similarity:Contains 4 EGF-like domains.,subunit:Interacts with RSPO1 and RSPO3 (By similarity). Interacts with FZD5. Essential componen

Background

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.[provided by RefSeq, Dec 2009],

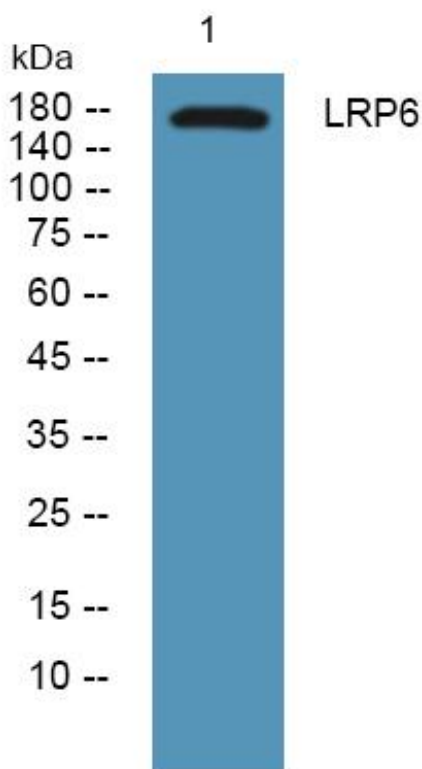
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using LRP6 Monoclonal Antibody