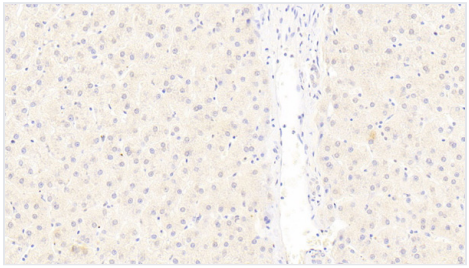
Low Density Lipoprotein Receptor Related Protein 6 (LRP6) Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	Low Density Lipoprotein Receptor Related Protein 6 (LRP6), Monoclonal Antibody
Full Product Name	Monoclonal Antibody to Low Density Lipoprotein Receptor Related Protein 6 (LRP6)
Product Gene Name	anti-LRP6 antibody
Product Synonym Names	LRP6/Low Density Lipoprotein Receptor Related Protein 6
Clonality	Monoclonal
Isotype	IgG1 Kappa
Clone Number	C9
Host	Mouse
Species Reactivity	Human, Pig
Form/Format	Liquid; 0.01M PBS, pH7.4, containing 0.05% Proclin300, 50% glycerol.
Purity/Purification	Protein A + Protein G affinity chromatography
Concentration	1mg/mL (lot specific)
Specificity	The antibody is a mouse monoclonal antibody raised against LRP6. It has been selected for its ability to recognize LRP6 in immunohistochemical staining and western blotting.
Preparation and Storage	Store at 2 degree C to 8 degree C for frequent use, 20 degree C for 24 months The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Matching Pairs	Unconjugated Antibody: LRP6 Clone #C9 (MBS2139236) APC-CY7 Conjugated Antibody: LRP6 Clone #C9 (MBS2135890)
Matching Pairs	Unconjugated Antibody: LRP6 Clone #C9 (MBS2139236) PE Conjugated Antibody: LRP6 Clone #C9 (MBS2135893)
Matching Pairs	Unconjugated Antibody: LRP6 Clone #C9 (MBS2139236) APC Conjugated Antibody: LRP6 Clone #C9 (MBS2135896)
Matching Pairs	Unconjugated Antibody: LRP6 Clone #C9 (MBS2139236) Cy3 Conjugated Antibody: LRP6 Clone #C9 (MBS2135899)
Matching Pairs	Unconjugated Antibody: LRP6 Clone #C9 (MBS2139236) Biotin Conjugated Antibody: LRP6 Clone #C9 (MBS2135902)
Matching Pairs	Unconjugated Antibody: LRP6 Clone #C9 (MBS2139236) FITC Conjugated Antibody: LRP6 Clone #C9 (MBS2135905)
Matching Pairs	Unconjugated Antibody: LRP6 Clone #C9 (MBS2139236) HRP Conjugated Antibody: LRP6 Clone #C9 (MBS2135908)
Molecular Weight	180,429 Da
Chromosome Location	Chromosome: 12; NC_000012.11 (12268959..12419811, complement). Location: 12p13.2
OMIM	603507
3D Structure	ModBase 3D Structure for O75581

Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Immunogen Type	Prokaryotic Recombinant proteins/RP
Sequence of Immunogen	Trp981~Gly1213
Conjugation	Unconjugated
Product Categories/Family for anti-LRP6 antibody	Metabolic pathway; Primary
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Applications Tested/Suitable for anti-LRP6 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunoprecipitation (IP)
Application Notes for anti-LRP6 antibody	WB: 0.52ug/mL IHC: 520ug/mL ICC: 520ug/mL
Related Product Information for anti-LRP6 antibody	MBS2139236 is an antibody targeting LRP6. Also known as Monoclonal Antibody to Low Density Lipoprotein Receptor Related Protein 6 (LRP6). Reactive in Human, Pig. Host: Mouse.
Other Notes	Small volumes of anti-LRP6 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Immunohistochemistry (IHC) of anti-LRP6 antibody
DAB staining on IHCP; Sample: Human Liver Tissue; Primary Ab: 20ug/ml Mouse AntiHuman LRP6 Antibody Second Ab: 2ug/mL HRPLinked Caprine AntiMouse IgG Polyclonal Antibody (Catalog: SAA544Mu19)

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for LRP6. It may not necessarily be applicable to this product.

NCBI GI #	148727288
NCBI GeneID	4040
NCBI Accession #	NP_002327.2
UniProt Primary Accession #	O75581
UniProt Secondary Accession #	Q17RZ2
UniProt Related Accession #	O75581
GenBank Nucleotide #	NM_002336.2
NCBI Official Full Name	low-density lipoprotein receptor-related protein 6
NCBI Official Synonym Full Names	low density lipoprotein receptor-related protein 6
NCBI Official Symbol	LRP6
NCBI Official Synonym Symbols	ADCAD2

UniProt Protein Name	Low-density lipoprotein receptor-related protein 6
Protein Family	Low-density lipoprotein receptor-related protein
UniProt Gene Name	LRP6
UniProt Synonym Gene Names	LRP-6
UniProt Entry Name	LRP6_HUMAN
NCBI Protein Information	low-density lipoprotein receptor-related protein 6; LRP-6
NCBI Summary for LRP6	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]

UniProt Comments for LRP6	LRP6: 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. Homodimer; disulfide-linked. Forms phosphorylated oligomer aggregates on Wnt-signaling. Forms a WNT-signaling complex formed of a WNT protein, a FZD protein and LRP5 or LRP6. Interacts (via the extracellular domain) with WNT1; the interaction is enhanced by prior formation of the Wnt/Fzd complex. Interacts (via the beta-propeller regions 3 and 4) with WNT3A. Interacts (via the beta-propeller regions 1 and 2) with WNT9B. Interacts with FZD5; the interaction forms a coreceptor complex for Wnt signaling and is inhibited by DKK1 and C1orf187. Interacts (via beta propeller region) with DKK1; the interaction inhibits FZD5/LRP6 complex formation. Interacts with DKK2. Interacts with C1orf187/DRAXIN; the interaction inhibits Wnt signaling. Interacts (via the phosphorylated PPPSP motifs) with AXIN1; the interaction recruits the AXIN1/GSK3B complex to cell surface LRP6 signalsomes. Interacts with GRB10; the interaction prevents AXIN1 binding, thus negatively regulating the Wnt signaling pathway. Interacts (via the extracellular domain) with RSPO1; the interaction activates Wnt/beta-catenin signaling. Interacts (via the extracellular domain) with RSPO3 (via the cysteine rich domain); the interaction activates Wnt/beta-catenin signaling. Interacts (via the beta- propeller regions 1 and 2) with SOST; the interaction competes with DKK1 for binding for inhibiting beta-catenin signaling. Interacts with MESD; the interaction prevents the formation of LRP6 aggregates and targets LRP6 to the plasma membrane. Interacts (via the cytoplasmic domain) with CSNKIE; the interaction phosphorylates LRP6, binds AXIN1 and inhibits AXIN1/GSK3B-mediated phosphorylation of beta-catenin. Interacts with MACF1. Decreased levels on WNT3A stimulation. Widely co-expressed with LRP5 during embryogenesis and in adult tissues. Belongs to the LDLR family. Protein type: Receptor, misc.; Membrane protein, integral Chromosomal Location of Human Ortholog: 12p13.2 Cellular Component: Golgi apparatus; cell surface; endoplasmic reticulum; early endosome; extracellular region; integral to membrane; caveola; cell soma; early endosome membrane; plasma membrane; synapse; cytoplasmic vesicle; receptor complex Molecular Function: low-density lipoprotein receptor activity; identical protein binding; Wnt-protein binding; Wnt receptor activity; protein binding; protein homodimerization activity; kinase inhibitor activity; frizzled binding; toxin transporter activity; apolipoprotein binding; receptor binding Biological Process: radial glial cell differentiation in the forebrain; regulation of fat cell differentiation; positive regulation of apoptosis; positive regulation of transcription, DNA-dependent; cerebellum morphogenesis; Wnt receptor signaling pathway through beta-catenin; embryonic pattern specification; bone remodeling; Wnt receptor signaling pathway in forebrain neuroblast division; anterior/posterior pattern formation; cell-cell adhesion; elevation of cytosolic calcium ion concentration; response to folic acid; convergent extension; positive regulation of mesenchymal cell proliferation; midbrain development; embryonic limb morphogenesis; external genitalia morphogenesis; neural crest formation; positive regulation of cell cycle; negative regulation of fat cell differentiation; midbrain-hindbrain boundary development; negative regulation of protein kinase activity; positive regulation of transcription from RNA polymerase II promoter; positive regulation of transcription factor activity; cerebral cortex development; embryonic digit morphogenesis; regulation of ossification; embryonic forelimb morphogenesis; response to peptide hormone stimulus; thalamus development; palate development; embryonic hindlimb morphogenesis; synaptic transmission; negative regulation of protein amino acid phosphorylation; positive regulation of bone resorption; heart looping; neural crest cell differentiation; cell migration involved in gastrulation; negative regulation of epithelial cell proliferation; Wnt receptor signaling pathway; gastrulation with mouth forming second; positive regulation of ossification; odontogenesis of dentine-containing teeth; formation of radial glial scaffolds; cerebral cortex cell migration; embryonic retina morphogenesis in camera-type eye; neural tube closure; embryonic camera-type eye morphogenesis Disease: Coronary Artery Disease, Autosomal Dominant 2
Research Articles on LRP6	**1.** Data indicate that LRP6, BCL2L14, DUSP16, CREBL2, and CDKN1B were involed in centromeric (12p11.21-12p13.2) deletion in ETV6-RUNX1 B-cell precursor acute lymphoblastic leukemia (BCP-ALL).
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