

LRP5 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14655b**Specification**

LRP5 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	O75197
Other Accession	O91VN0 , NP_002326.2
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	179145
Antigen Region	1163-1190

LRP5 Antibody (C-term) - Additional Information**Gene ID** 4041**Other Names**

Low-density lipoprotein receptor-related protein 5, LRP-5, LRP5, LR3, LRP7

Target/Specificity

This LRP5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1163-1190 amino acids from the C-terminal region of human LRP5.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LRP5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LRP5 Antibody (C-term) - Protein Information**Name** LRP5 {ECO:0000303|PubMed:24706814, ECO:0000312|HGNC:HGNC:6697}**Function** 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:[11719191](#), PubMed:[15778503](#), PubMed:[15908424](#), PubMed:[16252235](#)). Activates the canonical Wnt signaling pathway that controls cell fate determination and self-renewal during embryonic development and adult tissue regeneration (PubMed:[11336703](#), PubMed:[11719191](#)). In particular, may play an important role in the development of the posterior patterning of the epiblast during gastrulation (By similarity). During bone development, regulates osteoblast proliferation and differentiation thus determining bone mass (PubMed:[11719191](#)). Mechanistically, the formation of the signaling complex between Wnt ligand, frizzled receptor and LRP5 coreceptor promotes the recruitment of AXIN1 to LRP5, stabilizing beta-catenin/CTNNB1 and activating TCF/LEF-mediated transcriptional programs (PubMed:[11336703](#), PubMed:[14731402](#), PubMed:[24706814](#), PubMed:[25920554](#)). Acts as a coreceptor for non-Wnt proteins, such as norrin/NDP. Binding of norrin/NDP to frizzled 4/FZD4- LRP5 receptor complex triggers beta-catenin/CTNNB1-dependent signaling known to be required for retinal vascular development (PubMed:[16252235](#), PubMed:[27228167](#)). Plays a role in controlling postnatal vascular regression in retina via macrophage-induced endothelial cell apoptosis (By similarity).

Cellular Location

Membrane {ECO:0000250|UniProtKB:Q91VN0}; Single- pass type I membrane protein {ECO:0000250|UniProtKB:Q91VN0} Endoplasmic reticulum. Note=Chaperoned to the plasma membrane by MESD. {ECO:0000250|UniProtKB:Q91VN0}

Tissue Location

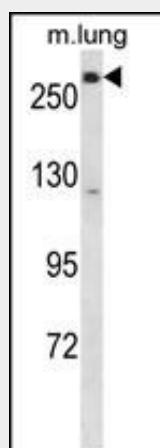
Widely expressed, with the highest level of expression in the liver and in aorta.

LRP5 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LRP5 Antibody (C-term) - Images



LRP5 Antibody (C-term) (Cat. #AP14655b) western blot analysis in mouse lung tissue lysates

(35ug/lane). This demonstrates the LRP5 antibody detected the LRP5 protein (arrow).

LRP5 Antibody (C-term) - Background

This gene encodes a transmembrane low-density lipoprotein receptor that binds and internalizes ligands in the process of receptor-mediated endocytosis. This protein also acts as a co-receptor with Frizzled protein family members for transducing signals by Wnt proteins and was originally cloned on the basis of its association with type 1 diabetes mellitus in humans. This protein plays a key role in skeletal homeostasis and many bone density related diseases are caused by mutations in this gene. Mutations in this gene also cause familial exudative vitreoretinopathy.

LRP5 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Lee, D.Y., et al. Menopause 17(5):1064-1070(2010)
Liu, J.M., et al. J. Clin. Endocrinol. Metab. 95 (9), E112-E120 (2010) :
Paternoster, L., et al. J. Clin. Endocrinol. Metab. 95(8):3940-3948(2010)
Stathopoulou, M.G., et al. J Am Diet Assoc 110(7):1078-1083(2010)