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LRP6 Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF2422a

Specification

LRP6 Antibody (internal region) - Product Information

Application	**IHC, FC, Pep-ELISA**
Primary Accession	O75581
Other Accession	NP_002327.2, 4040, 16974 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**180429**

LRP6 Antibody (internal region) - Additional Information

Gene ID 4040

Other Names
Low-density lipoprotein receptor-related protein 6, LRP-6, LRP6

Dilution
IHC~~1:100~500
FC~~1:10~50
Pep-ELISA~~N/A

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
LRP6 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

LRP6 Antibody (internal region) - 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:<a

href="http://www.uniprot.org/citations/11357136" target="_blank">11357136, PubMed:11448771, PubMed:15778503, PubMed:16341017, PubMed:16513652, PubMed:17326769, PubMed:17400545, PubMed:19107203, PubMed:19293931, PubMed:19801552, PubMed:28341812). Cell-surface coreceptor of Wnt/beta- catenin signaling, which plays a pivotal role in bone formation (PubMed:11357136, PubMed:11448771, PubMed:15778503, PubMed:16341017, PubMed:16513652, PubMed:17326769, PubMed:17400545, PubMed:19107203, PubMed:19293931, PubMed:19801552, PubMed:28341812). 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

LRP6 Antibody (internal region) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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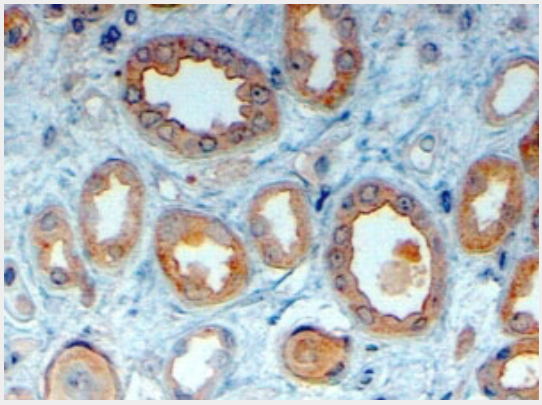
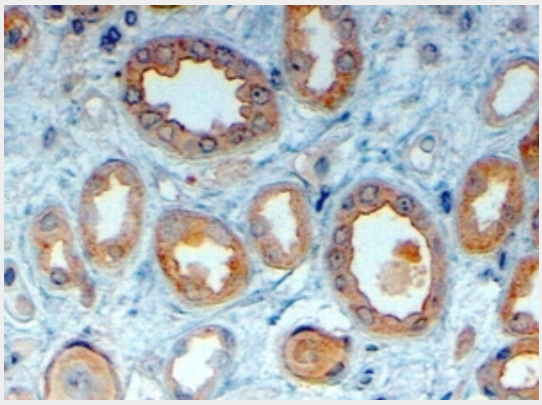
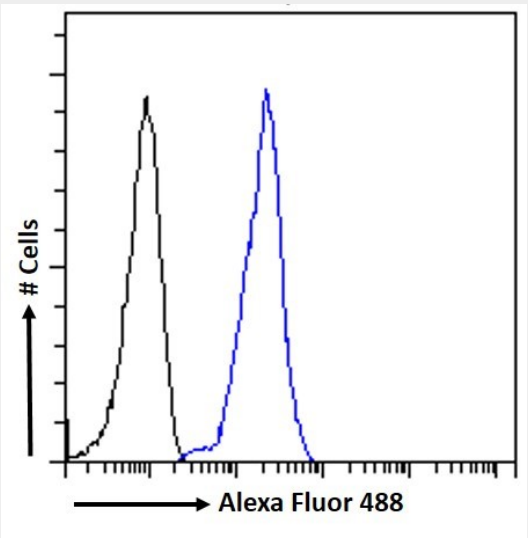
LRP6 Antibody (internal region) - Images



AF2422a (4 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.



EB06545 (4µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.



EB06545 Flow cytometric analysis of paraformaldehyde fixed K562 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fo

LRP6 Antibody (internal region) - Background

This antibody is expected to recognise an epitope corresponding to aa 1546-1560 of human LRP6 protein.

LRP6 Antibody (internal region) - References

LDL-receptor-related proteins in Wnt signal transduction. Tamai K, Semenov M, Kato Y, Spokony R, Liu C, Katsuyama Y, Hess F, Saint-Jeannet JP, He X. Nature. 2000 Sep 28;407(6803):530-5. PMID: 11029007