Qty: 100µg/400 µL

Rabbit anti-LRP5

Catalog No. 36-5400

Lot No.

Rabbit anti-LRP5

FORM
This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

PAD: ZMD.358

IMMUNOGEN
Synthetic peptide derived from the C-terminal region of the human LRP5 protein. This intracellular region is identical to the corresponding mouse and rat LRP5 amino acid sequences.

SPECIFICITY
This antibody reacts with human and mouse LRP5 proteins. On Western blots, it identifies a single band at ~200 kDa. Western blot tests using negative control mock pSEC-tag-transfected 293T cell lysates did not yield the target band.

REACTIVITY
Reactivity has been confirmed with mouse LRP5-pSEC-tag-transfected 293T cells, MCF-7 human breast adenocarcinoma, T47D human breast ductal carcinoma, and NIH-3T3 mouse embryo fibroblast lysates.

Sample	Western Blotting	Immunofluorescence	Immuno-precipitation
Human	+++	ND	0
Mouse	+++	+++	0
Rat	ND	ND	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1-3 µg/mL
Immunofluorescence: 2-3 µg/mL

NOTE: For optimal results in immunofluorescence assays, cells should be fixed in 4% paraformaldehyde/0.5% Triton X-100/PBS for 10 minutes, permeabilized with 0.5% Triton X-100/PBS for 5 minutes, and blocked with 5% BSA/PBS for 30 minutes.

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

BACKGROUND

WNT proteins have diverse roles in governing cell fate, proliferation, migration, porarity and death. WNT signaling controls development and is important for embryogenesis and carcinogenesis[1-3]. WNTs are transduced through at least three distinct intracellular signaling pathways including the canonical 'WNT/β-catenin', 'WNT/Ca^{2+}' and 'WNT' polarity (also called the 'planar polarity' pathway)[2, 4,5] pathways.

LRP5 (Low Density Lipoprotein Receptor-related Protein 5) is a member of the LDL receptor family, binds apolipoprotein E, and is widely expressed in many tissues, including hepatocytes, adrenal gland, and pancreas.[6] LRP5 functions as a WNT co-receptor and interacts with Frizzled receptors. LRP5 is important in embryonic development, bone accrual development, eye development, normal cholesterol metabolism, and glucose-induced insulin secretion.[6] Expression of LRP5 has also been used as a novel marker for disease progression in high-grade osteosarcoma.[7]

REFERENCES

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5. Kuhl M, et al. *Trends Genet* 16:279-283, 2000.
6. Magoori K, et al. *J Biol Chem* 278(13): 11331-11336, 2003.
7. Hoang BH, et al. *Int J Cancer* 109(1): 106-11, 2004.

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Cy™3	81-6115	81-6515
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HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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