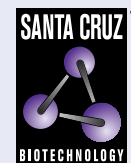


LRP6 (C-10): sc-25317



The Power to Question

BACKGROUND

Members of the LDL receptor gene family, including LDLR (low density lipoprotein receptor), LRP6 (low density lipoprotein related proteins), megalin (also designated GP330), VLDLR (very low density lipoprotein receptor) and ApoER2, are characterized by a cluster of cysteine-rich class A repeats, epidermal growth factor (EGF)-like repeats, YWTD repeats and an O-linked sugar domain. LRP1, also designated α -2-Macroglobulin receptor, is a endocytic receptor that mediates the uptake of at least 15 ligands, including α -2-Macroglobulin and ApoE. LRP1, which is expressed in brain, liver and lung, is also implicated in Alzheimer's disease (AD), as the human LRP1 gene localizes to a potential AD locus on chromosome 12. The human LRP6 gene localizes to chromosome 12p13.2 and encodes a protein with a unique pattern of four epidermal growth factor (EGF) and three LDLR repeats in the extracellular domain. LRP6 mediates Wnt/ β -catenin signaling, which controls various developmental processes, including patterning of the body axis, central nervous system and limbs, and regulation of organogenesis.

CHROMOSOMAL LOCATION

Genetic locus: LRP6 (human) mapping to 12p13.2; Lrp6 (mouse) mapping to 6 G1.

SOURCE

LRP6 (C-10) is a mouse monoclonal antibody raised against amino acids 1314-1613 of LRP6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LRP6 (C-10) is available conjugated to agarose (sc-25317 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-25317 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-25317 PE), fluorescein (sc-25317 FITC), Alexa Fluor[®] 488 (sc-25317 AF488), Alexa Fluor[®] 546 (sc-25317 AF546), Alexa Fluor[®] 594 (sc-25317 AF594) or Alexa Fluor[®] 647 (sc-25317 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-25317 AF680) or Alexa Fluor[®] 790 (sc-25317 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

LRP6 (C-10) is recommended for detection of LRP6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

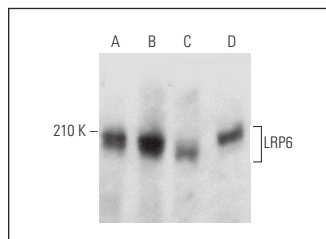
Suitable for use as control antibody for LRP6 siRNA (h): sc-37233, LRP6 siRNA (m): sc-37234, LRP6 shRNA Plasmid (h): sc-37233-SH, LRP6 shRNA Plasmid (m): sc-37234-SH, LRP6 shRNA (h) Lentiviral Particles: sc-37233-V and LRP6 shRNA (m) Lentiviral Particles: sc-37234-V.

Molecular Weight of LRP6: 183 kDa.

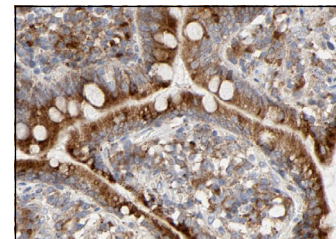
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



LRP6 (C-10): sc-25317. Western blot analysis of LRP6 expression in NRK (A), A-10 (B), L6 (C) and RBL-1 (D) whole cell lysates.



LRP6 (C-10): sc-25317. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing membrane and cytoplasmic staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Tezuka, N., et al. 2007. GRB10 binds to LRP6, the Wnt co-receptor and inhibits canonical Wnt signaling pathway. *Biochem. Biophys. Res. Commun.* 356: 648-654.
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- Lee, J.S., et al. 2012. A novel sLRP6E1E2 inhibits canonical Wnt signaling, epithelial-to-mesenchymal transition, and induces mitochondria-dependent apoptosis in lung cancer. *PLoS ONE* 7: e36520.
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- Liu, Y. and Jiang, D. 2017. Effect of bone-like hydroxyapatite/poly amino acid loaded with rifapentine microspheres on bone and joint tuberculosis *in vitro*. *Cell Biol. Int.* 41: 369-373.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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