

LRP5/6 (1A12): sc-57354

BACKGROUND

Members of the LDL receptor gene family, including LDLR (low density lipoprotein receptor), LRP5 (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. Of the known family members, LRP5 is most closely related to LRP1. However, LRP5 has a unique organization of EGF and LDLR repeats compared to other LDLR family members and likely represents a new category in this family. LRP is expressed in rat tibia in areas of the bone that are involved in remodeling. LRP5 is a Wnt co-receptor that binds to Axin and regulates the canonical Wnt signaling pathway. LRP5 affects bone mass accrual during growth. Mutations in LRP5 cause the autosomal recessive disorder osteoporosis-pseudoglioma syndrome (OPPG). The gene which encodes LRP5 maps to human chromosome 11q13.4. 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LRP5 (human) mapping to 11q13.4, LRP6 (human) mapping to 12p13.2; Lrp5 (mouse) mapping to 19 A, Lrp6 (mouse) mapping to 6 G1.

SOURCE

LRP5/6 (1A12) is a mouse monoclonal antibody raised against synthetic LRP5/6 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LRP5/6 (1A12) is recommended for detection of both the full length and proteolytic fragment of LRP 6 and LRP 5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

SELECT PRODUCT CITATIONS

- Liu, R., et al. 2011. Neural cell adhesion molecule potentiates the growth of murine melanoma via β -catenin signaling by association with fibroblast growth factor receptor and glycogen synthase kinase-3 β . *J. Biol. Chem.* 286: 26127-26137.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.