SANTA CRUZ BIOTECHNOLOGY, INC.

LRP11 (E-20): sc-247825



BACKGROUND

Members of the LDL receptor gene family, including LDLR (low density lipoprotein receptor), LRP1 (low density lipoprotein related protein), 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. LRP11 (low density lipoprotein receptor-related protein 11), also known as MANSC3, is a 500 amino acid single-pass type I membrane protein that exists as 2 alternatively spliced isoforms. LRP11 is encoded by a gene located on human chromosome 6q25.1. Chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

- Ishii, H., et al. 1998. cDNA cloning of a new low-density lipoprotein receptor-related protein and mapping of its gene (LRP3) to chromosome bands 19q12-q13.2. Genomics 51: 132-135.
- Croy, J.E., et al. 2003. All three LDL receptor homology regions of the LDL receptor-related protein bind multiple ligands. Biochemistry 42: 13049-13057.
- Gonias, S.L., et al. 2004. Low density lipoprotein receptor-related protein: regulation of the plasma membrane proteome. Thromb. Haemost. 91: 1056-1064.
- 4. May, P., et al. 2005. Molecular mechanisms of lipoprotein receptor signalling. Cell. Mol. Life Sci. 62: 2325-2338.
- May, P., et al. 2007. The LDL receptor-related protein (LRP) family: an old family of proteins with new physiological functions. Ann. Med. 39: 219-228.

CHROMOSOMAL LOCATION

Genetic locus: LRP11 (human) mapping to 6q25.1.

SOURCE

LRP11 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of LRP11 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-247825 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

LRP11 (E-20) is recommended for detection of LRP11 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other LRP family members.

LRP11 (E-20) is also recommended for detection of LRP11 in additional species, including bovine and porcine.

Suitable for use as control antibody for LRP11 siRNA (h): sc-95503, LRP11 shRNA Plasmid (h): sc-95503-SH and LRP11 shRNA (h) Lentiviral Particles: sc-95503-V.

Molecular Weight of LRP11 isoforms: 53/25 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HEK293 whole cell lysate: sc-45136 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



LRP11 (E-20): SC-247825. Western blot analysis of LRP11 expression in Jurkat (A), HEK293 (B), HeLa (C) and K-562 (D) whole cell lysates.

RESEARCH USE

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

