BACKGROUND

The leucine-rich repeat (LRR) is a 20-30 amino acid motif that forms a hydrophobic \( \alpha/\beta \) horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRRs contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. Leucine-rich protein (LRP130) is a cytoplasmic mRNA-binding protein likely to be involved in the processing of mitochondrial DNA transcripts. Defects in the LRPPRC gene that encodes LRP130 result in the French-Canadian type of Leigh syndrome, a severe neurological disorder characterized by lesions in the subcortical region of the brain. LRP130 also interacts with the low-affinity receptor for leukemia inhibitory factor to produce an intracellular signal cascade.

CHROMOSOMAL LOCATION

Genetic locus: LRPPRC (human) mapping to 2p21; Lrpprc (mouse) mapping to 17 E4.

SOURCE

LRP130 (G-10) is a mouse monoclonal antibody raised against amino acids 974-1273 mapping at the C-terminus of LRP130 of human origin.

PRODUCT

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-166177 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

LRP130 (G-10) is recommended for detection of LRP130 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 LRP130 siRNA (h): sc-44734, LRP130 siRNA (m): sc-44735, LRP130 shRNA Plasmid (h): sc-44734-SH, LRP130 shRNA Plasmid (m): sc-44735-SH, LRP130 shRNA (h) Lentiviral Particles: sc-44734-V and LRP130 shRNA (m) Lentiviral Particles: sc-44735-V.

LRP130 (G-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of LRP130: 137 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgGx BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGx BP-FITC: sc-516140 or m-IgGx BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

4) Immunohistochemistry: use m-IgGx BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohismount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

LRP130 (G-10): sc-166177. Western blot analysis of LRP130 expression in HeLa (A) and Hep G2 (B) whole cell lysates and HeLa nuclear extract (C).

LRP130 (G-10): sc-166177. Immunofluorescence staining of formalin-fixed Hep G2 cells showing mitochondrial localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS


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.