

LG14 (W-18): sc-74734

BACKGROUND

LG14 (leucine-rich repeat LG1 family member 4), also known as leucine-rich glioma-inactivated protein 4, is a 537 amino acid secreted glycosylated protein that is widely expressed, with highest levels found within the nervous system. Interestingly, siRNA knockdown studies of LG14 expression in Schwann cells have been shown to result in the inhibition of myelination, thus suggesting that LG14 is an essential component of myelin formation and axon segregation. LG14 shares significant homology with its other family members, LG11, LG12 and LG13. Significantly, mutations in the gene encoding LG11 have been linked to human temporal lobe epilepsy and, given the sequence similarity of LG14, it is likely that it also may be implicated in the pathology of seizures. LG14 is localized subcellularly to the Golgi, ER and vesicles. There are two isoforms of LG14 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LG14 (human) mapping to 19q13.12; Lgi4 (mouse) mapping to 7 B1.

SOURCE

LG14 (W-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LG14 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-74734 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LG14 (W-18) is recommended for detection of LG14 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

LG14 (W-18) is also recommended for detection of LG14 in additional species, including equine, canine, bovine and porcine.

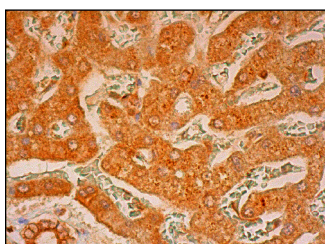
Suitable for use as control antibody for LG14 siRNA (h): sc-75422, LG14 siRNA (m): sc-75423, LG14 shRNA Plasmid (h): sc-75422-SH, LG14 shRNA Plasmid (m): sc-75423-SH, LG14 shRNA (h) Lentiviral Particles: sc-75422-V and LG14 shRNA (m) Lentiviral Particles: sc-75423-V.

Molecular Weight of LG14: 59 kDa.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



LG14 (W-18): sc-74734. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes and bile duct cells.

STORAGE

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