

# LGI4 (KT18): sc-101488

## BACKGROUND

LGI4 (leucine-rich repeat LGI 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 LGI4 expression in Schwann cells have been shown to result in the inhibition of myelination, thus suggesting that LGI4 is an essential component of myelin formation and axon segregation. LGI4 shares significant homology with its other family members, LGI1, LGI2 and LGI3. Significantly, mutations in the gene encoding LGI1 have been linked to human temporal lobe epilepsy and, given the sequence similarity of LGI4, it is likely that it also may be implicated in the pathology of seizures. LGI4 is localized subcellularly to the Golgi, ER and vesicles. There are two isoforms of LGI4 that are produced as a result of alternative splicing events.

## REFERENCES

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## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: Lgi4 (mouse) mapping to 7 B1.

## SOURCE

LGI4 (KT18) is a rat monoclonal antibody raised against LGI4 of mouse origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

LGI4 (KT18) is recommended for detection of LGI4 of mouse 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for LGI4 siRNA (m): sc-75423, LGI4 shRNA Plasmid (m): sc-75423-SH and LGI4 shRNA (m) Lentiviral Particles: sc-75423-V.

Molecular Weight of LGI4: 59 kDa.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.