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LGI4 Antibody
Catalog # ASC10659

Specification

LGI4 Antibody - Product Information

Application	**WB**
Primary Accession	Q8N135
Other Accession	AAM49552, 21359654
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**LGI4 antibody can be used for the detection of LGI4 by Western blot at 1 - 2 µg/mL.**

LGI4 Antibody - Additional Information

Gene ID **163175**

Target/Specificity
LGI4; Two isoforms of LGI4 are known to exist; this LGI4 antibody will recognize only the larger form. This LGI4 antibody is predicted to be specific to LGI4 and not recognize other LGI proteins.

Reconstitution & Storage
LGI4 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
LGI4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LGI4 Antibody - Protein Information

Name LGI4

Synonyms LGIL3

Function
Component of Schwann cell signaling pathway(s) that controls axon segregation and myelin formation (By similarity).

Cellular Location
Secreted.

Tissue Location
Widely expressed, with highest expression in brain.

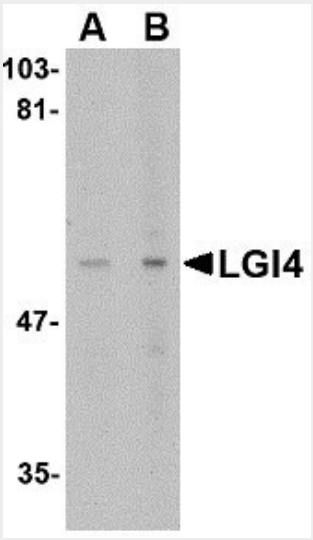
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LGI4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LGI4 Antibody - Images



Western blot analysis of LGI4 in rat brain tissue lysate with LGI4 antibody at (A) 1 and (B) 2 µg/mL.

LGI4 Antibody - Background

LGI4 Antibody: The leucine-rich, glioma inactivated gene 4 (LGI4) is a member of the LGI family in which LGI1 is the exemplar. The LGI family consists of four of highly related proteins containing leucine-rich repeats (LRRs) which are highly similar to other transmembrane signaling molecules and receptors. LGI1 has been identified as a candidate tumor suppressor gene for glioma and plays a role in autodominant lateral temporal epilepsy (ADTLE), an epileptic syndrome characterized by focal seizures with predominant auditory symptoms. Despite its high homology with LGI1 and similar pattern of expression, mutations in LGI4 have not been found to be associated with ADTLE. However, the LGI4 gene is located in a region linked to benign familial infantile convulsions. Further study revealed that a GC-to-AT polymorphism was correlated with childhood absence epilepsy. Other studies showed that decreasing LGI4 expression in cultured cells inhibits myelination, indicating that LGI4 may play a role in neural development.

LGI4 Antibody - References

Gu W, Gibert Y, Wirth T, et al. Using gene-history and expression analysis to assess the involvement of LGI genes in human disorders. Mol. Biol. Evol.2005; 22:2209-16.
Chernova OB, Somerville RP and Cowell JK. A novel gene, LGI1, from 10q24 is rearranged and downregulated in malignant brain tumors. Oncogene1998; 17:2873-81.

Berkovic SF, Izzillo P, McMahon JM, et al. LGI1 mutations in temporal lobe epilepsies. Neurology2004; 62:1115-9.
Gu W, Sander T, Becker T, et al. Genotypic association of exonic LGI4 polymorphism and childhood absence epilepsy. Neurogenetics2004; 5:41-4.