

LGI4 Antibody

Catalog # ASC10660

Product Information

Application	WB, E
Primary Accession	Q8N135
Other Accession	AAM49552 , 21359654
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	59141
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	LGI4 antibody can be used for the detection of LGI4 by Western blot at 1 - 2 μ g/mL.

Additional Information

Gene ID	163175
Other Names	Leucine-rich repeat LGI family member 4, LGI1-like protein 3, Leucine-rich glioma-inactivated protein 4, LGI4, LGIL3
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°C for three months and -20°C, 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.

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.

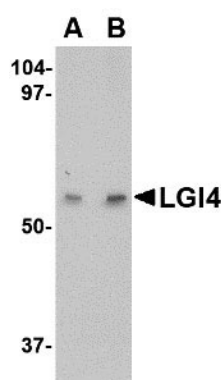
Background

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 autodominate 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.

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. *Oncogene*1998; 17:2873-81.
Berkovic SF, Izzillo P, McMahon JM, et al. LGI1 mutations in temporal lobe epilepsies. *Neurology*2004; 62:1115-9.
Gu W, Sander T, Becker T, et al. Genotypic association of exonic LGI4 polymorphism and childhood absence epilepsy. *Neurogenetics*2004; 5:41-4.

Images



Western blot analysis of LGI4 in human brain tissue lysate with LGI4 antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.