

**LGI3 Antibody**  
**Catalog # ASC10653****Specification**

---

**LGI3 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q8N145</a>
Other Accession	<a href="#">AAO88483</a> , <a href="#">37181338</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	LGI3 antibody can be used for the detection of LGI3 by Western blot at 1 µg/mL.

**LGI3 Antibody - Additional Information**Gene ID **203190****Target/Specificity**

LGI3; Two isoforms of LGI3 are known to exist; this LGI3 antibody will recognize both. This LGI3 antibody is predicted to be specific to LGI3 and not recognize other LGI proteins. The observed higher molecular weight band may represent a post-translationally modified form of LGI3.

**Reconstitution & Storage**

LGI3 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**

LGI3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**LGI3 Antibody - Protein Information****Name** LGI3**Synonyms** LGIL4**Function**

May participate in the regulation of neuronal exocytosis.

**Cellular Location**

Secreted. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle {ECO:0000250|UniProtKB:Q8K406}. Synapse, synaptosome {ECO:0000250|UniProtKB:Q8K406}. Cell projection, axon {ECO:0000250|UniProtKB:Q8K406}. Note=Found in the synaptosomal membrane fraction. Within peripheral myelinated axons, LGI3 is highly expressed at the juxtaparanodal membrane and colocalizes with the voltage-gated potassium channels Kv1.1 (KCNA1) and Kv1.2 (KCNB2), and with CNTNAP2, DLG4, ADAM22 and ADAM23 (By similarity)

{ECO:0000250|UniProtKB:Q8K406}

#### **Tissue Location**

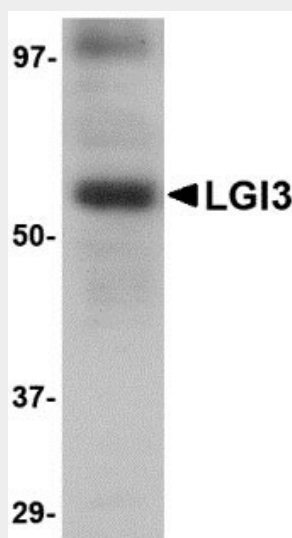
Widely expressed, with highest levels in brain and lung.

#### **LGI3 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 Cytometry](#)
- [Cell Culture](#)

#### **LGI3 Antibody - Images**



Western blot analysis of LGI3 in human brain tissue lysate with LGI3 antibody at 1 µg/mL.

#### **LGI3 Antibody - Background**

**LGI3 Antibody:** The leucine-rich, glioma inactivated gene 3 (LGI3) 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 autosomal dominant 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 LGI3 have not been found to be associated with ADTLE. LGI3 expression is induced in rat astrocyte cultures by the amyloid beta (Aβ) peptide and accumulated on neuronal plasma membranes of aged monkey brains and co-localized with Aβ.

#### **LGI3 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.

Kimura N, Ishii Y, Suzaki S, et al. Abeta upregulates and colocalizes with LGI3 in cultured rat astrocytes. Cell Mol. Neurobiol.2007; 27:335-50.