

LGI1 Antibody

LGI1 Antibody, Clone S283-7 Catalog # ASM10293

### Specification

# LGI1 Antibody - Product Information

Application Primary Accession Other Accession Host Isotype Reactivity Clonality Format **Description** Mouse Anti-Mouse LGI1 Monoclonal IgG2a

<u>O9JIA1.1</u> <u>NP\_064674.1</u> Mouse IgG2a Human, Mouse, Rat Monoclonal ATTO 390

WB

**Target/Specificity** Detects ~60kDa.

#### **Other Names**

ADLTE Antibody, ADPAEF Antibody, ADPEAF Antibody, Epitempin 1 Antibody, EPT Antibody, ETL1 Antibody, IB1099 Antibody, leucine rich glioma inactivated 1 Antibody, OTTHUMP00000020121 Antibody, OTTHUMP00000020122 Antibody

### Immunogen

Fusion protein amino acids 37-113 (LRRNT domain and first LRR repeat) of mouse LGI1. Rat: 100% identity (77/77 amino acids identical). Human: 98% identity (76/77 amino acids identical). ~50% identity with LGI2, LGI3 and LGI4.

Purification Protein G Purified

Shipping Temperature

Storage Storage Buffer PBS pH 7.4, 50% glycerol, 0.1% sodium azide

-20ºC

Blue Ice or 4ºC

**Certificate of Analysis** 1  $\mu$ g/ml of SMC-461 was sufficient for detection of LGI1 in 20  $\mu$ g of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization Cell Junction | Golgi Apparatus | Endoplasmic Reticulum

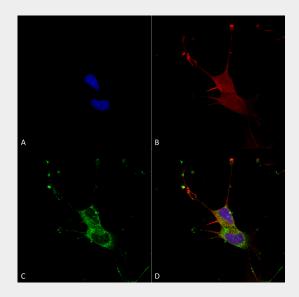
# LGI1 Antibody - Protocols

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

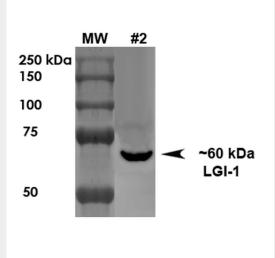


- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### LGI1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-LGI1 Monoclonal Antibody, Clone N283/7 (ASM10293). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-LGI1 Monoclonal Antibody (ASM10293) at 1:100 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) LGI1 Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~60 kDa LGI1 protein using Mouse Anti-LGI1 Monoclonal Antibody, Clone N283/7 (ASM10293). Load: 10  $\mu$ g. Primary Antibody:



Mouse Anti-LGI1 Monoclonal Antibody (ASM10293) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse HRP at 1:200 for 1 hour at RT. Predicted/Observed Size: ~60 kDa.

### LGI1 Antibody - Background

The leucine-rich, glioma inactivated gene 1 (LGI1) was first identified as a candidate tumor suppressor gene for glioma and may play a role in other cancers. LGI1 is a member of a family of highly related proteins containing leucine-rich repeats (LRRs) which are highly similar to other transmembrane signaling molecules and receptors. LGI1 serves as a ligand to ADAM22, a metalloprotease localized at the synapse. Mutations in LGI1 account for nearly half of autodominant lateral temporal epilepsy (ADTLE), an epileptic syndrome characterized by focal seizures with predominant auditory symptoms. Two isoforms of LGI1 are known to exist; this LGI1 antibody will recognize only the longer form.

### LGI1 Antibody - References

- 1. Chernova O.B., Somerville R.P. and Cowell J.K. (1998) Oncogene. 17:2873-81.
- 2. Fialka F., et al. (2008) Oral Oncol.
- 3. Gu W., et al. (2005) Mol. Biol. Evol. 22:2209-16.
- 4. Fukata Y., et al. (2006) Science. 313:1792-5.