12170 Flint Place
Poway, CA 92064
www.prosci-inc.com

Toll Free: 888-513-9525
Tel: 858-513-2638
Fax: 858-513-2692
techsupport@prosci-inc.com

LGI1 Antibody

LGI1 (NT): Leucine-rich, glioma inactivated 1, epitempin, EPT

CATALOG NO.: 4531

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 (1,2). 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 (3). LGI1 serves as a ligand to ADAM22, a metalloprotease localized at the synapse (4). Mutations in LGI1 account for nearly half of autodominant lateral temporal epilepsy (ADTLE), an epileptic syndrome characterized by focal seizures with predominant auditory symptoms (5). Two isoforms of LGI1 are known to exist, but the top band seen in the western blot is likely to be non-specific. This LGI1 antibody is predicted to be specific to LGI1 and not recognize other LGI proteins.

SOURCE:

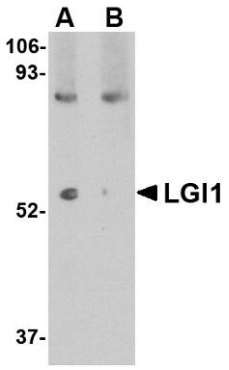
Rabbit polyclonal LGI1 antibody was raised against a 13 amino acid peptide from near the amino terminus of human LGI1 (Genbank accession No. AAQ89244).

APPLICATION:

LGI1 antibody can be used for the detection of LGI1 by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user). Mouse brain tissue lysate can be used as positive control. LGI1 antibody is human, mouse and rat reactive. **This product is for research use only.**

STORAGE:

LGI1 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4˚C, stable for one year.



Western blot analysis of LGI1 in mouse brain tissue lysate with LGI1 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.

RELATED PRODUCTS:

Blocking peptide, Catalog No. **4531P.**
Mouse Brain Tissue Lysate, Catalog No. **1403.**
LGI1 Antibody (IN), Catalog No. **4489.**
LGI2 Antibody (NT), Catalog No. **4491.**
LGI3 Antibody (IN), Catalog No. **4493.**
LGI4 Antibody (CT), Catalog No. **4511.**

REFERENCES:

1. 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.
2. Fialka F, Gruber RM, Hitt R, et al. CPA6, FMO2, LGI1, SIAT1 and TNC are differentially expressed in early- and late-stage oral squamous cell carcinoma – A pilot study. *Oral Oncol.* 2008;
3. 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.
4. Fukata Y, Adesnik H, Iwanaga T, et al. Epilepsy-related ligand/receptor complex LGI1 and ADAM22 regulate synaptic transmission. *Science* 2006; 313:1792-5.
5. Berkovic SF, Izzillo P, McMahon JM, et al. LGI1 mutations in temporal lobe epilepsies. *Neurology* 2004; 62:1115-9.
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