

LGI4 (IN) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat LGI4 (Leucine-rich, glioma inactivated 4)

Instruction Manual

| | |
|---------------------|---|
| Catalog Number | PK-AB718-4513 |
| Synonyms | LGI4 Antibody: Leucine-rich, glioma inactivated 4 |
| Description | 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. 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. |
| Quantity | 100 µg |
| Source / Host | Rabbit |
| Immunogen | LGI4 antibody was raised in rabbits against a 14 amino acid peptide from near the center of human LGI4. |
| Purification Method | Affinity chromatography purified via peptide column. |
| Clone / IgG Subtype | Polyclonal antibody |
| Species Reactivity | Human, Mouse, Rat |
| Specificity | 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. |
| Formulation | Antibody is supplied in PBS containing 0.02% sodium azide. |
| Reconstitution | During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap. |
| Storage & Stability | Antibody can be stored at 4°C for three months and at -20°C 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. |
| Applications | E, WB [Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.] LGI4 antibody can be used for the detection of LGI4 by Western blot at 1 - 2 µg/mL. |
| Images | Available upon request. |
| 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. <i>Mol. Biol. Evol.</i> 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. <i>Oncogene</i> 1998; 17:2873-81. Berkovic SF, Izzillo P, McMahon JM, et al. LGI1 mutations in temporal lobe epilepsies. <i>Neurology</i> 2004; 62:1115-9. Gu W, Sander T, Becker T, et al. Genotypic association of exonic LGI4 polymorphism and childhood absence epilepsy. <i>Neurogenetics</i> 2004; 5:41-4. |
| Images | Available upon request. |
| Related Products | Cat.No. PK-AB718-4513P; LGI4 Peptide Cat.No. PK-AB718-1463; Rat Brain Tissue Lysate |

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.