

#### DESCRIPTION

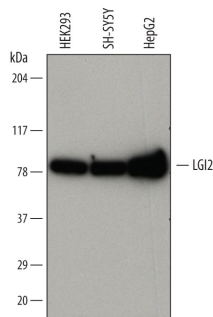
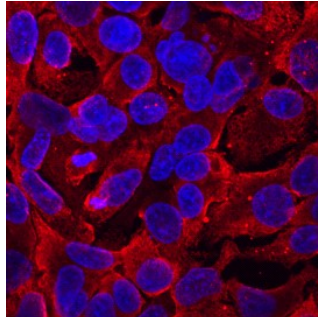
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human LGI2 in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 748914
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human LGI2 Gln29-Ser276 Accession # Q8N0V4
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

#### DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human LGI2 by Western Blot.</b> Western blot shows lysates of HEK293 human embryonic kidney cell line, SH-SY5Y human neuroblastoma cell line, and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human LGI2 Monoclonal Antibody (Catalog # MAB7334) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for LGI2 at approximately 80 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>LGI2 in HepG2 Human Cell Line.</b> LGI2 was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Mouse Anti-Human LGI2 Monoclonal Antibody (Catalog # MAB7334) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>
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#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

LGI2 (leucine-rich, glioma-inactivated 2) is an approximately 100 kDa secreted glycoprotein in the LGI family of LRR (leucine-rich repeat) proteins. LGI2 cDNA encodes a 28 amino acid (aa) signal sequence and a 517 aa mature protein with 5 LRR domains and 7 EAR (epilepsy-associated repeat) domains. It is mainly expressed in various regions of the brain and spinal cord, but mRNA is also found in the heart and placenta. Mutation or deletion of LGI2 is associated with the temporal lobe epilepsy syndrome PEPs (partial epilepsy with pericentral spikes). Within aa 29-276, human LGI2 shares 99% aa sequence identity with mouse and rat LGI2, provided a 23 aa gap and a 32 aa insertion in mouse LGI2 at sites corresponding to human aa 139 and aa 218, respectively, are disregarded.