

**DESCRIPTION**

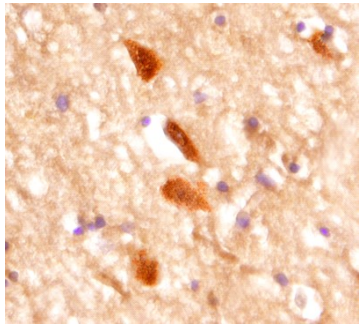
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human mGLUR in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 464823
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human mGluR5 Ser19-Ser509 Accession # P41594
<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 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>Immunohistochemistry</b>	8-25 µg/mL	See Below

**DATA**

<p><b>Immunohistochemistry</b></p> 	<p><b>mGluR5 in Human Brain.</b> mGluR5 was detected in immersion fixed paraffin-embedded sections of human brain (cerebellum) using 25 µg/mL Mouse Anti-Human mGluR5 Monoclonal Antibody (Catalog # MAB45141) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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**

Human metabotropic glutamate receptor 5 (mGluR5; also known as mGluR5b) is a 150 kDa, 7-transmembrane glycoprotein that belongs to group I of the C-family of G-protein coupled receptors. mGluR5 is constitutively expressed and regulates neuronal ion channel activity. Human mGluR5 is 1212 amino acids (aa) in length and contains an N-terminal extracellular domain (ECD) of 558 aa. Through its ECD, mGluR5 either homodimerizes or heterodimerizes with the Ca<sup>++</sup>-sensor receptor. There is one alternate splice form (mGluR5a) that shows a 32 aa deletion between aa 877-908 in the cytoplasmic tail. Over aa 21-509, human mGluR5 shares 98% aa sequence identity with mouse, rat, and dog mGluR5.