

**DESCRIPTION**

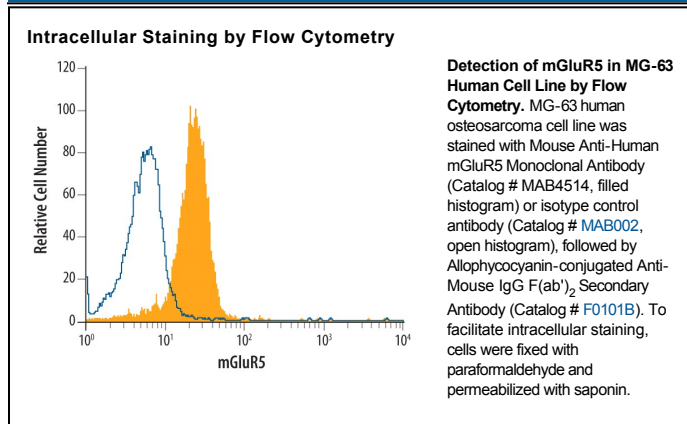
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human mGluR5 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human mGluR1, R2, R3, R4, R7, or R8 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 464818
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human mGluR5 Gln21-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>Western Blot</b>	1 µg/mL	Recombinant Human mGluR5
<b>Intracellular Staining by Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**



**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 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 aa in length and contains an extracellular domain (ECD) of 558 amino acids. 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 19-509, human mGluR5 is 98% aa identical to mouse, rat, and dog mGluR5.