

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human mGluR3 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 440511
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Hek293 cells transfected with human mGluR3 Accession # Q14832
<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.

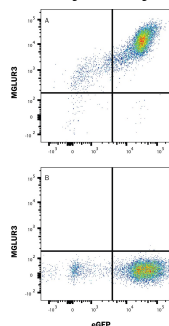
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	HEK293 Human Cell Line Transfected with Human mGluR3 and eGFP
<b>Immunohistochemistry</b>	5-25 µg/mL	Immersion fixed paraffin-embedded sections of human brain (hypothalamus)

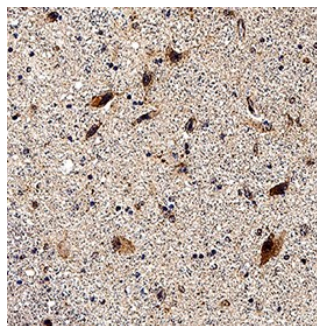
## DATA

### Flow Cytometry



**Detection of mGluR3 in HEK293 Human Cell Line Transfected with Human mGluR3 and eGFP by Flow Cytometry** HEK293 human embryonic kidney cell line transfected with (A) human mGluR3 or (B) irrelevant protein, and eGFP was stained with Mouse Anti-Human mGluR3 Monoclonal Antibody (Catalog # MAB46682) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on control antibody staining (Catalog # MAB003). Staining was performed using our Staining Membrane-associated Proteins protocol.

### Immunohistochemistry



**mGluR3 in Human Brain.** mGluR3 was detected in immersion fixed paraffin-embedded sections of human brain (hypothalamus) using Mouse Anti-Human mGluR3 Monoclonal Antibody (Catalog # MAB46682) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell bodies and processes. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

## 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>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

Metabotropic glutamate receptor 3 (mGluR3) is a 90-100 kDa, 7-transmembrane glycoprotein that belongs to group II of the C-family of G-protein coupled receptors. It is a presynaptic receptor expressed on both neurons and glia, whose activation reduces adenylate cyclase activity. Mature human mGluR3 is 857 amino acids in length and contains a 554 amino acid (aa) N-terminal extracellular domain (ECD) (aa 23-576). The ECD binds glutamate and forms homodimers. There is one alternative splice form that is soluble, 515 aa in length and shows a 96 aa substitution for aa 442-879. Over aa 25-507, human mGluR3 shares 97% aa sequence identity with mouse and rat mGluR3 and 67% aa sequence identity with hGluR2.