



## Monoclonal Anti-human mGluR1 Antibody

### ORDERING INFORMATION

**Catalog Number:** MAB4836

**Clone:** 511622

**Lot Number:** CCTV01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS  
with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human mGluR1

**Immunogen:** CHO-derived rhmGluR1

**Ig class:** mouse IgG<sub>2A</sub>

**Recommended Application:**  
Immunohistochemistry

### Background

Metabotropic glutamate receptor 1 (mGluR1 $\alpha$ ) is a 130 kDa, 7-transmembrane glycoprotein that belongs to group I of the C-family of G-protein coupled receptors. On neurons, mGluR1 is postsynaptic, associates with G<sub>i</sub>-like proteins, mobilizes intracellular Ca<sup>++</sup>, and influences ion channel activity. Mature mGluR1 is 1176 amino acids (aa) in length and contains a 574 aa N-terminal extracellular domain (ECD) (aa 19 - 592). The ECD binds glutamate and forms either a covalent homodimer, or heterodimer with CaSR. There is one alternative splice form for human mGluR1 that shows a 20 aa substitution for the C-terminal 308 amino acids. Over aa 33 - 522, human mGluR1 shares more than 98% aa identity with mouse, rat and canine mGluR1.

### Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, CHO-derived, recombinant human mGluR1 (rhGluR1; aa 33 - 522; Accession # Q13255). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody detects rhmGluR1 in direct ELISAs.

### Application

**Immunohistochemistry** - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents to detect rhmGluR1 in paraffin-embedded normal human caudate putamen tissue sections. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

**For immunohistochemistry images, please refer to our website at**  
<http://www.RnDSystems.com/go/ihc>.

**Optimal dilutions should be determined by each laboratory for each application.**

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