

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human mGluR1a in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 511601
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human mGluR1a Met1-Ser522 Accession # Q13255
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	HEK293 Human Cell Line Transfected with Human MGLUR1 and eGFP

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Metabotropic glutamate receptor 1 (mGluR1α) 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_q-like proteins, mobilizes intracellular Ca⁺⁺, 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.

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