

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Monoclonal Mouse IgG ₁ Clone # 464818
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human mGluR5 Gln21-Ser509 Accession # P41594
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	MG-63 human osteosarcoma cell line fixed with paraformaldehyde and permeabilized with saponin

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

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 Ca²⁺-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.

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