

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GluR4 in direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 1059705
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Synthetic peptide Accession # P48058
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

Flow Cytometry	Titration recommended for optimal concentration with starting range of 0.1-1 µg/1 million cells. Sample used for this experiment was PBMC lymphocytes cells.
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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. • 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Metabotropic glutamate receptor 4 (mGluR4) is a 95-110 kDa Group III mGluR member of the Class C, GPCR 3 family of proteins. The mGluR family of receptors are 7-transmembrane (TM), non-ion channel glutamate-binding molecules that are linked to adenylyl cyclase. mGluR4 is widely expressed, being found on/in multiple cell types, including colonic, breast, urinary and skin epithelium. It is also found on neurons where it is located presynaptically and regulates neurotransmitter release. In general, mGluR4 activation results in a slowing of either glutamine or GABA release. However, in discrete areas, it actually facilitates glutamine release. Mature human mGluR4 is an 880 amino acid (aa) 7-TM molecule (aa 33-912). It contains a 555 aa N-terminal extracellular region (aa 33-587), plus a 65 aa C-terminal cytoplasmic domain. mGluR4 potentially forms homodimers, and is reported to heterodimerize with both mGluR2 and mGluR8. Based on rodent, there is one 68 kDa isoform that is found in taste buds and shows an alternative start site at Met309. Two additional potential splice variants contain a second alternative start site at Met209, and an Asp substitution for aa 343-390, respectively. It is uncertain if human possesses a mGluR4b found in rodent. Over aa 1-518, human mGluR4 shares 96% aa identity with mouse mGluR4.

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