

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GluR7/GRIK3 in direct ELISA.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2914A
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell, HEK293-derived human GluR7/GRIK3 Gly249-Met1 Accession # Q13003
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 CHO cells transfected with hGRIK3 vs irrelevant CHO transfectant 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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

GluR7 is a receptor for glutamate. Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain. This gene can co-assemble with GRIK4 or GRIK5 to form heteromeric receptors. GluR7 is one of the five subtypes of kainate receptors. Kainate receptors are widely expressed in the CNS and are involved in the regulation of transmitter release, synapse formation, and in the pathophysiology of brain diseases. Genetic variants in the GluR7 gene are associated with schizophrenia, major depression, and bipolar disorder.

References:

1. Entrez Gene: GRIK3 glutamate receptor, ionotropic, kainate 3.
2. Matute C. "Therapeutic Potential of Kainate Receptors". CNS Neuroscience & Therapeutics. 2011 Dec; **17(6)**:661.
3. Begni S, Popoli M, Moraschi S, Bignotti S, Tura G.B, Gennarelli M., "Association Between the Ionotropic Glutamate Receptor Kainate 3 (GRI3) Ser310Ala Polymorphism and Schizophrenia". Mol Psychiatry. 2002; **7(4)**:416.

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