

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GluR3 in direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 1059821
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic Peptide Accession # P42263
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

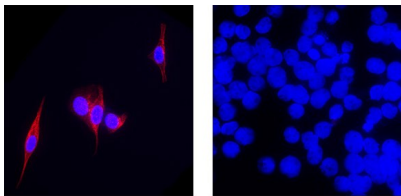
APPLICATIONS

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
Immunocytochemistry	5-25 µg/mL	TT human medullary thyroid cancer cell line (positive) and THP-1 human acute monocytic leukemia cell line (negative)

DATA

Immunocytochemistry



TT (Positive) cells THP-1 (Negative) cells

Detection of GluR3 in TT (positive) and THP-1 (negative) cells. GluR3 was detected in immersion fixed TT human medullary thyroid cancer cell line (positive) and absent in THP-1 human acute monocytic leukemia cell line (negative) using Mouse Anti-Human GluR3 Monoclonal Antibody (Catalog # MAB11329) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell surface and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

GluR3 is a receptor for glutamate. Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiological processes. This gene belongs to a family of AMPA receptors. GluR3 is a gene product of the GRIA3 gene and its pre-mRNA is subject to RNA editing. In humans, 80-90% of GRIA3 transcripts are edited. This allows sustained response to rapid stimuli. There is a tentative link between defective GRIA3 variants and a highly elevated risk of schizophrenia.

References:

- Entrez Gene: GRIA3 glutamate receptor, ionotropic, AMPA 3.
- Seeburg PH, Higuchi M, Sprengel R. "RNA Editing of Brain Glutamate Receptor channels: Mechanism and Physiology". Brain Res. Brain Res. Rev. 1998, May; **26(2-3)**:217.
- Lomeli H, Mosbacher J, Höger T, Geiger JR, Kuner T, Monyer H, Higuchi M, Bach A, Seeburg PH., "Control of Kinetic Properties of AMPA rReceptor Channels by Nuclear RNA Editing". Science. 1994, Dec; **266(5191)**:1709.