

Product Datasheet

Anti-mGluR1/5 (Group I) Glutamate Receptor Antibody FL650 Conjugate



Overview

Catalog #	75-115-FL650
Conjugate	FL650 Ex: 655 nm, Em: 676 nm
Isotype	IgG2a
Clone Number	N75/3
Size	200 μ L
Concentration	0.5 mg/mL
Host Species	Mouse Monoclonal
Format	Purified by Protein A chromatography
Buffer	PBS with 0.09% azide
Applications	ICC, IHC
Species Reactivity	Human, Mouse, and Rat
Immunogen	Fusion protein amino acids 824-1203 (cytoplasmic C-terminus) of rat mGluR5b (accession number P31424) produced recombinantly in E. Coli
Molecular Weight	130 kDa (both mGluR1 and mGluR5)
Cite this Antibody	Antibodies Inc Cat# 75-115-FL650, RRID: AB_2939431

Details

Target Description	The metabotropic glutamate receptors (mGluRs) are key receptors in the modulation of excitatory synaptic transmission in the central nervous system. They are implicated in many forms of neural plasticity as well as learning and memory and drug abuse (Bhattacharya et al., 2004; Francesconi et al., 2004; Wilson and Nicoll, 2001). Group I metabotropic glutamate receptors (consisting of mGluR1 and mGluR5) are G-protein-coupled neurotransmitter receptors that are localized in the perisynaptic region of the postsynaptic membrane. When activated, Group I mGluRs lead to stimulation of phospholipase and activation of Protein Kinase C. In contrast, activation of Group II metabotropic receptors (mGluR2 and mGluR3) leads to inhibition of adenylate cyclase. The mGluR1 receptor may also be critically involved in limiting the deleterious effects of excitotoxicity (Blaabjerg et al., 2003). In contrast, the mGluR5 receptor appears to be essential for late phase LTP in area CA1 of the hippocampus (Francesconi et al., 2004).
Specificity	Recognizes mGluR1 and mGluR5
Purification Method	Produced by in vitro bioreactor culture of hybridoma line followed by Protein A affinity chromatography and conjugation of purified mAb. Purified mAbs are >90% specific antibody.

Quality Control Tests

Each new lot of antibody is quality control tested by western blot on rat whole brain lysate and confirmed to stain the expected molecular weight band.

Storage

Aliquot and store at $\leq -20^{\circ}\text{C}$ for long term storage. For short term storage, store at $2-8^{\circ}\text{C}$. For maximum recovery of product, centrifuge the vial prior to removing the cap.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience our 50+ year passion for science.

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