

#### **Product Datasheet**

# Anti-mGluR1/5 (Group I) Glutamate Receptor Antibody FL490 Conjugate



#### Overview

Catalog # 75-116-FL490

Conjugate FL490 Ex: 491 nm, Em: 515 nm

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# 75-116-FL490, RRID: AB 2939432

## **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°C for long term storage. For short term storage, store at 2-8°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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