

# Product datasheet

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# ARG52339 anti-mGluR1a + mGluR5 antibody

Package: 50 μl Store at: -20°C

## Summary

Product Description Rabbit Polyclonal antibody recognizes mGluR1a + mGluR5

Tested Reactivity Rat

Predict Reactivity Hu, Ms

Tested Application IHC-Fr, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name mGluR1a + mGluR5

Species Rat

Immunogen Peptide from the C-terminal region of rat mGluR5 and rat mGluR1a.

Conjugation Un-conjugated

Alternate Names PPP1R86; mGlu5; GPRC1E; Metabotropic glutamate receptor 5; mGluR5; MGLUR5

### **Application Instructions**

Application table	Application	Dilution
	IHC-Fr	Assay-dependent
	WB	1:1000
Application Note	Specific for the ~125k monomer and the ~250k dimers of mGluR5 and mGluR1. Immunolabeling is blocked by preadsorption of antibody with the peptide used as antigen to geneRate the antibody.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Affinity Purified

Buffer 10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol

Stabilizer 0.1 mg/ml BSA, 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GenelD: 24418 Rat

Swiss-port # P31424 Rat

Gene Symbol GRM5

Gene Full Name glutamate receptor, metabotropic 5

Background The metabotropic glutamate receptors (mGluRs) are key receptors in the modulation of excitatory

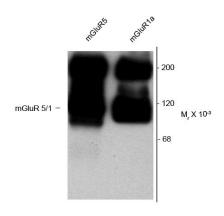
synaptic transmission in the central nervous system. They are implicated in many forms of neural plasticity as well as learning and memory and drug abuse (Bhattacharya et al., 2004; Francesconi et al., 2004; Wilson and Nicoll, 2001). Group I metabotropic glutamate receptors (consisting of mGluR1 and 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).

Research Area Cancer antibody; Neuroscience antibody; Signaling Transduction antibody

Calculated Mw 132 kDa

#### **Images**



#### ARG52339 anti-mGluR1a + mGluR5 antibody WB image

Western blot: 10  $\mu$ g of HEK 293 cells expressing mGluR1a and mGluR5 showing specific immunolabeling of the ~125k monomer and the ~250k dimers of mGluR1a and mGluR5 stained with ARG52339 anti-mGluR1a + mGluR5 antibody.