OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AP08693PU-N

mGluR5/1a (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	**Western blot:** 1/1000. **Immunohistochemistry:** 1/500.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Peptide from the C-terminal region of rat mGluR5 and rat mGluR1a.
Specificity:	This antibody is 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.
Formulation:	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction.
Purification:	Affinity Chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.

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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).

Synonyms: GRM1A, GRM5, MGLUR1a, MGLUR5

Product images:

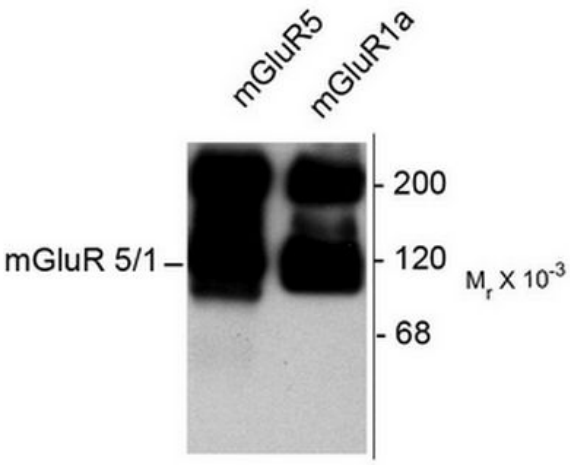

Figure 1. Western blot of 10 ug of HEK 293 cells expressing mGluR1a and mGluR5 showing the specific immunolabeling of the ~125k monomer and the ~250k dimers of mGluR1a and mGluR5.