

**Cat.No. 191 103; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)**

## Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> 1 : 1000 (AP staining) <b>IP:</b> not tested yet <b>ICC:</b> not tested yet <b>IHC:</b> not tested yet <b>IHC-P/FFPE:</b> not tested yet
Immunogen	Synthetic peptide corresponding to AA 837 to 853 from rat mGluR2 (UniProt Id: P31421)
Reactivity	Reacts with: rat (P31421), mouse (Q14BI2). Other species not tested yet.
Specificity	Specific for mGluR2.
matching control	191-1P

### TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Glutamate is the main excitatory neurotransmitter in the vertebrate nervous system and regulates a number of cellular signaling pathways. In addition to the ionotropic glutamate receptors of the NMDA, AMPA and kainate type, eight metabotropic receptors (mGluR1 - 8) have been described so far. This receptor family can be subdivided into three groups: Group I receptors (**mGluR1**, mGluR5) are activated by dihydroxyphenylglycine (DHPG), group II receptors (**mGluR2**, mGluR3) by dicarboxycyclopropylglycine (DCG-IV), and group III receptors (mGluR4, mGluR6, mGluR7, mGluR8) by aminophosphonobutyrate (L-AP4).

## Selected General References

Depression of GABAergic input to identified hippocampal neurons by group III metabotropic glutamate receptors in the rat. Kogo N, Dalezios Y, Capogna M, Ferraguti F, Shigemoto R, Somogyi P  
The European journal of neuroscience (2004) 19(10): 2727-40.

Long-term potentiation of mGluR1 activity by depolarization-induced Homer1a in mouse cerebellar Purkinje neurons. Minami I, Kengaku M, Smitt PS, Shigemoto R, Hirano T  
The European journal of neuroscience (2003) 17(5): 1023-32.

Differential distribution of group I metabotropic glutamate receptors during rat cortical development. López-Bendito G, Shigemoto R, Fairén A, Luján R  
Cerebral cortex (New York, N.Y. : 1991) (2002) 12(6): 625-38.

Increased seizure susceptibility in mice lacking metabotropic glutamate receptor 7. Sansig G, Bushell TJ, Clarke VR, Rozov A, Burnashev N, Portet C, Gasparini F, Schmutz M, Klebs K, Shigemoto R, Flor PJ, et al.  
The Journal of neuroscience : the official journal of the Society for Neuroscience (2001) 21(22): 8734-45.

Differential plasma membrane distribution of metabotropic glutamate receptors mGluR1 alpha, mGluR2 and mGluR5, relative to neurotransmitter release sites. Luján R, Roberts JD, Shigemoto R, Ohishi H, Somogyi P  
Journal of chemical neuroanatomy (1997) 13(4): 219-41.

Developmentally regulated postsynaptic localization of a metabotropic glutamate receptor in rat rod bipolar cells. Nomura A, Shigemoto R, Nakamura Y, Okamoto N, Mizuno N, Nakanishi S  
Cell (1994) 77(3): 361-9.

The metabotropic glutamate receptor (mGluR1 alpha) is concentrated at perisynaptic membrane of neuronal subpopulations as detected by immunogold reaction. Baude A, Nusser Z, Roberts JD, Mulvihill E, McIlhinney RA, Somogyi P  
Neuron (1993) 11(4): 771-87.

Depolarization- and agonist-regulated expression of neuronal metabotropic glutamate receptor 1 (mGluR1). Favaron M, Rimland JM, Manev H  
Life sciences (1992) 50(22): PL189-94.

Distribution of the mRNA for a metabotropic glutamate receptor (mGluR1) in the central nervous system: an in situ hybridization study in adult and developing rat. Shigemoto R, Nakanishi S, Mizuno N  
The Journal of comparative neurology (1992) 322(1): 121-35.