



## **Anti-Glutamate Receptor, metabotropic 2, Rabbit-Polyclonal Antibody**

**Catalog No.** GB-30102  
**Antigen species:** Human  
**Host species:** Rabbit

**Quantity:** 100 $\mu$ g  
**Reactivity:** Human  
**Form:** Peptide affinity purified antibody

**Applications:** ELISA

### **Target description**

Glutamate is the major excitatory neurotransmitter in the central nervous system and activates both ionotropic and metabotropic glutamate receptors. The metabotropic glutamate receptors are a family of G protein-coupled receptors that have been divided into 3 groups. GRM2 is a receptor for glutamate and is a member of the Group II of G protein coupled receptor family (subfamily metabotropic glutamate). GRM2 receptor is linked to the inhibition of the cyclic AMP cascade and has been reported primarily in the brain. ESTs have been isolated from B-cell/lung/testis, brain, breast, kidney, and testis libraries.

### **Antigen**

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide containing amino acids on the predicted extracellular domain (20-400) of human GRM2.

### **Application**

The antibody specificity was assayed by ELISA with the synthetic GRM2 peptide antigen. The antiserum titer is about 97K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/3,000 dilution for ELISA, 1/500 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/20 dilution for immunohistochemistry staining on frozen cryosections, 1/1 dilution for IHC staining on paraffin embedded sections.

### **Related Products**

1. Anti-glutamate receptor, metabotropic 8 (Grm8), pAb (GB-30105)

Ab dilution	Pre-bleed	Purified-Ab
1:100	0.436	1.976
1:1,000	0.336	1.465
1:10,000	0.110	0.407
1:100,000	0.070	0.106
1:1,000,000	0.074	0.065
Titer		97K

### **ELISA Protocol**

Antigen is coated on EIA strips at 1 $\mu$ g per well. Add 200 $\mu$ l of blocking buffer and then wash wells with PBST buffer. Pre-immune serum and peptide specific purified antibody GB-30102 is diluted in series as  $10^2 \sim 10^6$  folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined positive as >0.1 of ABS of antiserum minus pre-bleed serum.

### **Storage**

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1 $\times$ PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

### **References**

1. Pim J.P., Duvoisin R., 1995. The metabotropic glutamate receptors: structure and functions. *Neuropharmacology* 34: 1-26.
2. Dietrich, D., Kral, T., Clusmann, H., Friedl, M., and Schramm, J., 2002. Presynaptic group II metabotropic glutamate receptors reduce stimulate and spontaneous transmitter release in human dentate gyrus. *Neuropharmacology*. 42(3), 297-305.

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