

# **GRM2 Antibody / Metabotropic Glutamate Receptor 2 (RQ5579)**

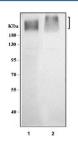
Catalog No.	Formulation	Size
RQ5579	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

## **Bulk quote request**

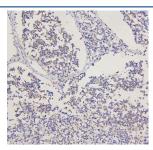
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q14416
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells Immunohistochemistry (FFPE) : 2-5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This GRM2 antibody is available for research use only.



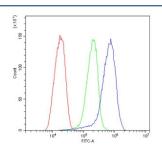
Western blot testing of 1) rat brain and 2) mouse brain lysate with GRM2 antibody. Predicted molecular weight ~96 kDa, routinely observed at 110-120 kDa (monomer) and 220-240 kDa (dimer).



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IHC staining of FFPE human glioma tissue with GRM2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Flow cytometry testing of fixed and permeabilized human HepG2 cells with GRM2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= GRM2 antibody.

### **Description**

Metabotropic glutamate receptor 2 (mGluR2) is a protein that, in humans, is encoded by the GRM2 gene. It is mapped to 3p21.2. L-glutamate is the major excitatory neurotransmitter in the central nervous system and activates both ionotropic and metabotropic glutamate receptors. Glutamatergic neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. The metabotropic glutamate receptors are a family of G protein-coupled receptors, that have been divided into 3 groups on the basis of sequence homology, putative signal transduction mechanisms, and pharmacologic properties. Group I includes GRM1 and GRM5 and these receptors have been shown to activate phospholipase C. Group II includes GRM2 and GRM3 while Group III includes GRM4, GRM6, GRM7 and GRM8. Group II and III receptors are linked to the inhibition of the cyclic AMP cascade but differ in their agonist selectivities. Several transcript variants encoding different isoforms have been found for this gene.

#### **Application Notes**

Optimal dilution of the GRM2 antibody should be determined by the researcher.

#### **Immunogen**

A human recombinant protein (amino acids N439-A710) was used as the immunogen for the GRM2 antibody.

#### **Storage**

After reconstitution, the GRM2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.