

**Product Name: mGluR7 Rabbit Polyclonal Antibody****Catalog #: APRab13864**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
<b>Molecular Weight</b>	102kDa

**Antigen Information**

<b>Gene Name</b>	GRM7
<b>Alternative Names</b>	GRM7; GPRC1G; MGLUR7; Metabotropic glutamate receptor 7; mGluR7
<b>Gene ID</b>	2917.0
<b>SwissProt ID</b>	Q14831
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human GRM7. AA range:351-400

**Background**

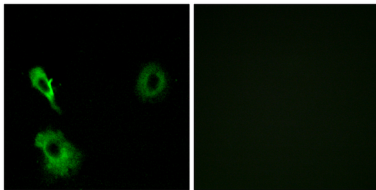
glutamate metabotropic receptor 7(GRM7) Homo sapiens L-glutamate is the major excitatory neurotransmitter in the central

nervous system, and it 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 three 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. Multiple transcript variants encoding different isoforms have been found. **function:** Receptor for glutamate. The activity of this receptor is mediated by a G-protein that inhibits adenylate cyclase activity. **similarity:** Belongs to the G-protein coupled receptor 3 family. **subunit:** Interacts with PICK1. **tissue specificity:** Expressed in many areas of the brain, especially in the cerebral cortex, hippocampus, and cerebellum. Expression of GRM7 isoforms in non-neuronal tissues appears to be restricted to isoform 3 and isoform 4.

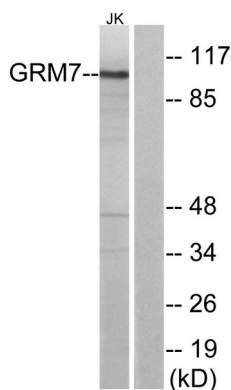
## Research Area

Neuroactive ligand-receptor interaction;

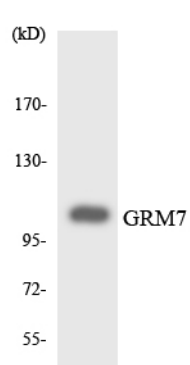
## Image Data



Immunofluorescence analysis of A549 cells, using GRM7 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using GRM7 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HUVECcells using GRM7 antibody.