

**Anti-Human/Mouse/Rat GRM7 Polyclonal Antibody****Polyclonal Antibody****Cat.NO.: PA04958**

3th Edition

**Description:**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 for this gene. GRM7 (Glutamate Metabotropic Receptor 7) is a Protein Coding gene. Diseases associated with GRM7 include Attention Deficit-Hyperactivity Disorder and Mental Depression. Among its related pathways are Phospholipase D signaling pathway and Peptide ligand-binding receptors. GO annotations related to this gene include G-protein coupled receptor activity and PDZ domain binding. An important paralog of this gene is GRM8.

**Antigen:**Synthesized peptide derived from the C-terminal region of human mGluR-7

**Form:**

**How to use:**1.0 ml distilled water will be added to the product

**Stability:** Lyophilized product, 5 years at 2 – 8°C; Solution, 2 years at –20°C

**Dilution:**PBS (pH7.4) containing 1% BSA

**Application:**This antibody can be used for western blotting in concentration of 1?5?g/ml.

**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.