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## GRM1 Rabbit pAb

Catalog Number: bs-12011R

Target Protein: GRM1

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (2ug/Test)

Reactivity: Human, Mouse, Zebrafish (predicted:Rat, Pig, Sheep, Cow, Chicken, Dog, Horse)

Predicted MW: 130 kDa

Detected MW: 140-150 kDa

Entrez Gene: 2911

Swiss Prot: Q13255

Source: KLH conjugated synthetic peptide derived from human MGLUR1: 151-250/1194.

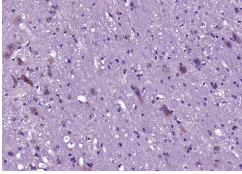
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

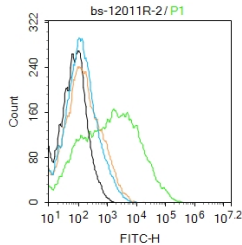
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** 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. The canonical alpha isoform of the metabotropic glutamate receptor 1 gene is a disulfide-linked homodimer whose activity is mediated by a G-protein-coupled phosphatidylinositol-calcium second messenger system. Alternative splicing results in multiple transcript variants encoding distinct isoforms; some of which may have distinct functions. [provided by RefSeq].

## VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GRM1) Polyclonal Antibody, Unconjugated (bs-12011R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: Mouse brain. Primary Antibody (green line): Rabbit Anti-GRM1 antibody (bs-12011R) Dilution: 2µg / 10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-FITC Dilution: 1µg / test. Protocol: The cells were incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=15.1] Edward A. Vizcarra. et al. Group 1 metabotropic glutamate receptor expression defines a T cell memory population during chronic Toxoplasma infection that enhances IFN-gamma and perforin production in the CNS. BRAIN BEHAV IMMUN. 2023 Nov;114:131 FCM ; Mouse . 37604212