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Product datasheet for TA328842

Grm8 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)ENFG(S)KLGSHGKR, corresponding to amino acid residues 365- 377 of rat mGluR8. Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	glutamate metabotropic receptor 8
Database Link:	NP_071538 Entrez Gene 2918 HumanEntrez Gene 14823 MouseEntrez Gene 60590 Rat P70579

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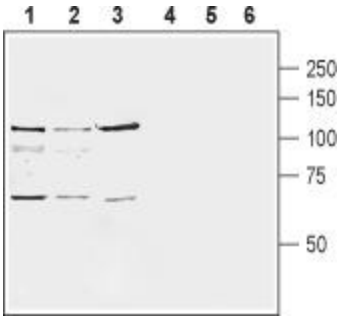
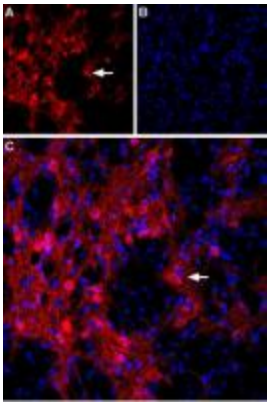
Background: Metabotropic glutamate receptors (mGluRs), heptahelical transmembrane receptors coupled to G-proteins, contribute to the regulation of neuronal excitability and synaptic transmission. Genes coding for eight mGluRs (denoted mGluR1-8) with different splice variants have been identified and classified into three groups based on sequence homology, pharmacology, and signaling pathways. Group I mGluRs (mGluR1 and mGluR5) are primarily located postsynaptically. Group II (mGluR2 and mGluR3) are present both postsynaptically and presynaptically outside the release site. Group III mGluRs (mGluR4, mGluR6, mGluR7, and mGluR8) couple to Gai/o to inhibit adenylyl cyclase found in the presynaptic active zone. The mGluR8 receptor is detected in the olfactory bulb, thalamus, pontine gray, cerebral cortex, hippocampus, cerebellum, and retina. Electrophysiological studies suggest that mGluR8 functions as a presynaptic autoreceptor to regulate glutamate release from the lateral perforant path terminals in the mouse dentate gyrus. It is suggested that mGluR8, like other group III mGluRs, controls glutamate release by inhibiting voltage-gated Ca2+ channels. Targeted deletion of the mGluR8 gene in mice produces subtle behavioral alterations such as reduced habituation to novelty, hyperactivity, context-dependent but not cue-dependent disruption of the freezing response in the fear conditioning test, and increased anxiety.

Synonyms: FLJ41058; GLUR8; GPRC1H; MGC126724; mGlu8; MGLUR8; OTTHUMP00000024506; OTTHUMP00000069010; OTTHUMP00000199504

Product images:



Western blot analysis of rat brain membranes (lanes 1 and 4), mouse brain membranes (lanes 2 and 5) and human SH-SY5Y neuroblastoma cell line lysate (lanes 3 and 6): 1-3. Anti-mGluR8 (extracellular) antibody, (1:400). 4-6. Anti-mGluR8 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of mGluR8 in rat globus pallidus. Immunohistochemical staining of immersion-fixed, free floating rat brain frozen sections using Anti-mGluR8 (extracellular) antibody, (1:100). A. Staining reveals expression of mGluR8 (red) in globus pallidus neurons (arrow) and their dendrites. B, The same section was also stained with DAPI (blue) revealing cell nuclei. C. Merge of the two images.