

mGluR5 Polyclonal Antibody

YT2745 Catalog No:

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: mGluR5

Fields: >>Calcium signaling pathway;>>Phospholipase D signaling

pathway;>>Neuroactive ligand-receptor interaction;>>Gap junction;>>Long-term

potentiation;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Alzheimer disease;>>Huntington disease;>>Pathways of

neurodegeneration - multiple diseases

Gene Name: GRM5

Protein Name: Metabotropic glutamate receptor 5

P41594

Human Gene Id: 2915

Human Swiss Prot

No:

Mouse Gene Id: 108071

Mouse Swiss Prot

Q3UVX5

No:

Rat Gene Id: 24418

Rat Swiss Prot No: P31424

The antiserum was produced against synthesized peptide derived from human Immunogen:

GRM5. AA range:21-70

Specificity: mGluR5 Polyclonal Antibody detects endogenous levels of mGluR5 protein.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG



Dilution: WB 1:500 - 1:2000, IHC 1:100 - 1:300, IF 1:200 - 1:1000, ELISA: 1:10000, Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 130kD

Cell Pathway: Calcium; Neuroactive ligand-receptor interaction; Gap junction; Long-term

potentiation;Long-term depression;Huntington's disease;

Background: glutamate metabotropic receptor 5(GRM5) Homo sapiens This gene encodes a

member of the G-protein coupled receptor 3 protein family. The encoded protein

is a metabatropic glutamate receptor, whose signaling activates a

phosphatidylinositol-calcium second messenger system. This protein may be involved in the regulation of neural network activity and synaptic plasticity. Glutamatergic neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. A pseudogene of this gene has been defined on chromosome 11. Alternative splicing results in

multiple transcript variants. [provided by RefSeq, May 2014],

Function: function: Receptor for glutamate. The activity of this receptor is mediated by a G-

protein that activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current.,similarity:Belongs to the G-protein coupled receptor 3 family.,subunit:The PPXXF motif binds HOMER1, HOMER2 and HOMER3. Interacts with SIAH1, RYR1, RYR2, ITPR1, SHANK1,

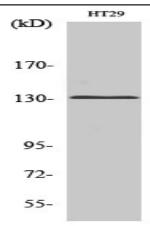
SHANK3 and GRASP.,

Subcellular Location:

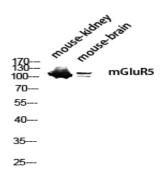
Cell membrane; Multi-pass membrane protein.

Expression: Brain,

Products Images

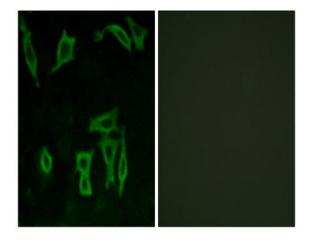


Western Blot analysis of various cells using mGluR5 Polyclonal Antibody diluted at 1:1000

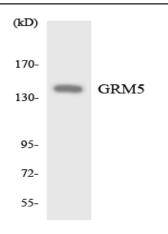


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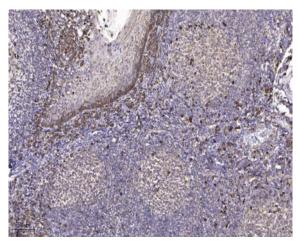
Western blot analysis of mouse-kidney mouse-brain lysis using mGluR5 antibody. Antibody was diluted at 1:1000



Immunofluorescence analysis of LOVO cells, using GRM5 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using GRM5 antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).