#12056 Store at -20°C

mGluR2 Antibody

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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New 01/13

For Research Use Only. Not For Use In Diagnostic Procedures.

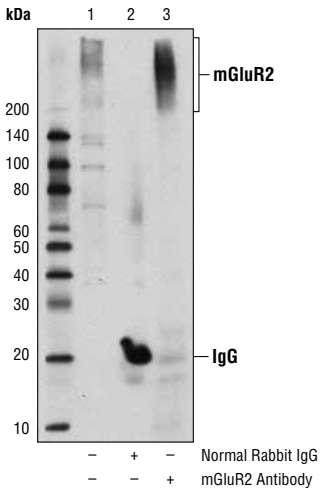
Entrez-Gene ID #108068
Swiss-Prot Acc. #Q14BI2

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	M, R	100, >200 kDa	Rabbit**

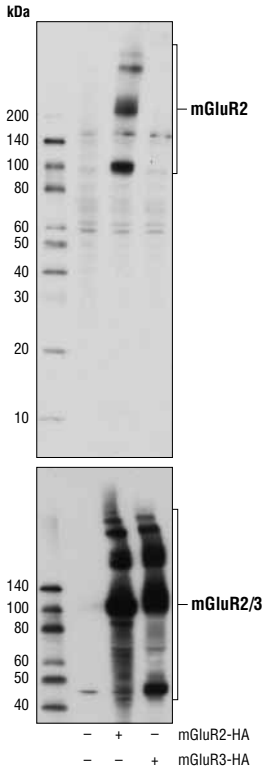
Background: Metabotropic glutamate receptor 2 (mGluR2) is a class C G protein-coupled receptor for the neurotransmitter glutamate in the mammalian brain. Unlike ionotropic receptors, metabotropic receptors do not form an ion channel pore themselves but are indirectly linked to ion channels (1). While mGluR1 and mGluR5 activate phospholipase C, mGluR2, mGluR3, mGluR4, and mGluR6 are coupled to the inhibitory G protein Gα(i/o) and inhibit adenylyl cyclase (AC) activity (1). Research studies have suggested that mGluR2/3 receptors may be potential targets for the treatment of Schizophrenia (2). Furthermore, mGluR2 interacts with the 5HT2A serotonin receptor to form a hetero-complex in the brain. This complex is a potential pharmacological target for hallucinogenic drugs (3,4).

Specificity/Sensitivity: mGluR2 recognizes endogenous levels of total mGluR2 protein. This antibody does not cross-react with mGluR3.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala839 of mouse mGluR2 protein. Antibodies are purified by protein A and peptide affinity chromatography.



◀ *Immunoprecipitation of mGluR2 from mouse brain extracts using Normal Rabbit IgG #2729 (lane 2) or mGluR2 Antibody (lane 3). Lane 1 is 10% input. Western blot analysis was performed using mGluR2 Antibody.*



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with constructs expressing HA-tagged full-length mouse mGluR2 (mGluR2-HA; +) or HA-tagged full-length mouse mGluR3 (mGluR3-HA; +), using mGluR2 Antibody (upper) or HA-Tag (C29F4) Rabbit mAb #3724 (lower). HA-tagged mGluR cDNAs were a gift from Dr. Gonzalez-Maeso (Mount Sinai School of Medicine, NY).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

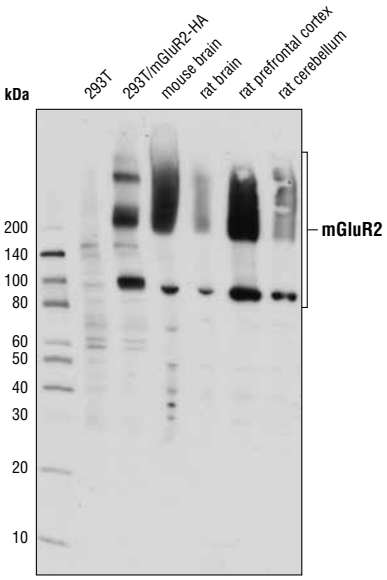
Background References:

(1) Pin, J.P. et al. (1994) *EMBO J* 13, 342-8.

(2) Patil, S.T. et al. (2007) *Nat Med* 13, 1102-7.

(3) González-Maeso, J. et al. (2008) *Nature* 452, 93-7.

(4) González-Maeso, J. and Sealfon, S.C. (2009) *Trends Neurosci* 32, 225-32.



Western blot analysis of extracts from the indicated cell lines and tissues using mGluR2 Antibody.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat drymilk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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