

#76012 Store at -20C

**mGluR2 (D7D8M) Rabbit mAb****Cell Signaling**  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-F	H M R	Endogenous	100, >200	Rabbit IgG	#Q14416	2912

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Frozen)

**Dilution**

1:1000  
1:50  
1:200

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity / Sensitivity**

mGluR2 (D7D8M) Rabbit mAb recognizes endogenous levels of total mGluR2 protein. This antibody may cross-react with mGluR3.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the extracellular loops of mouse mGluR2 protein.

**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).

**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.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

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

**Applications Key**

**WB:** Western Blotting **IP:** Immunoprecipitation **IF-F:** Immunofluorescence (Frozen)

**Cross-Reactivity Key**

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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