

mGluR2 (D7D8M) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, 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 G α (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 5HT_{2A} 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

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

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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