

#2460 Store at -20°C

AMPA Receptor (GluR 2/3/4) Antibody



✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #2891
Swiss-Prot Acc. #P42262

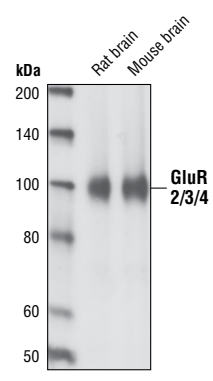
Applications W Endogenous	Species Cross-Reactivity* H, M, R	Molecular Wt. 100 kDa	Source Rabbit**
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Background: AMPA- (α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid), kainite- and NMDA- (N-methyl-D-aspartate) receptors are the three main families of ionotropic glutamate-gated ion channels. AMPA receptors (AMPA receptors) are comprised of four subunits (GluR1-4), which assemble as homo- or hetero-tetramers and mediate the majority of fast excitatory transmission in the CNS. AMPARs are implicated in synapse formation, stabilization and plasticity (1). AMPARs that lack GluR2 are permeable to calcium in contrast to GluR2 containing AMPARs (2). Post-transcriptional modifications (alternative splicing and nuclear RNA editing) and post-translational modifications (glycosylation, phosphorylation) result in a very large number of permutations, fine-tuning the kinetic properties of AMPARs. Activity changes of AMPARs are implicated in a variety of diseases including Alzheimer's, amyotrophic lateral sclerosis (ALS), stroke and epilepsy (1).

Specificity/Sensitivity: AMPA Receptor (GluR 2/3/4) Antibody detects endogenous levels of total GluR 2/3/4 protein. It may also detect GluR1.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser720 of human GluR2. Antibodies are purified by protein A and peptide affinity chromatography.

- Background References:**
- (1) Palmer, C.L. et al. (2005) *Pharmacol. Rev.* 57, 253-277.
 - (2) Cull-Candy, S. et al. (2006) *Curr. Opin. Neurobiol.* 16, 288-297.



Western blot analysis of extracts from rat and mouse brain using AMPA Receptor (GluR 2/3/4) Antibody.

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

For application 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 companion products.

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

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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.