

PRODUCT INFORMATION



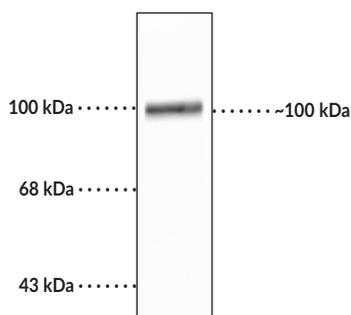
GluR2/3 Polyclonal Antibody

Item No. 29279

Overview and Properties

Contents: This vial contains 100 µl of affinity-purified rabbit polyclonal antibody.
Immunogen: Peptide corresponding to amino acid residues from the C-terminal region of rat GluR2/3
Molecular Weight: ~100 kDa
Species Reactivity: (+) Rat
Form: Liquid
Storage: -20°C (as supplied)
Stability: ≥1 year
Storage Buffer: 10 mM HEPES, pH 7.5, with 150 mM sodium chloride, 100 µg BSA per ml, and 50% glycerol
Host: Rabbit
Applications: Western blot (WB); the recommended starting dilution is 1:1,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



WB of rat hippocampal lysate showing specific immunolabeling of the ~100 kDa GluR2/3 protein.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

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Description

AMPA receptors are ionotropic glutamate receptors that mediate excitatory synaptic transmission.^{1,2} They are tetrameric protein complexes expressed throughout the central nervous system in both neurons and glia that are assembled from combinations of GluR1, GluR2, GluR3, and GluR4, also known as GluR-A-D, subunits, each of which has extracellular N-terminal and ligand binding domains, a channel domain consisting of three membrane-spanning helices and a channel pore loop, and an intracellular C-terminus.^{1,3-5} GluR1 and GluR2 are predominantly expressed in the forebrain, with low levels of GluR3 and GluR4, and pyramidal neurons express AMPA receptors primarily comprised of heterotetramers of GluR1 and GluR2 subunits. Hippocampal pyramidal neurons also express AMPA receptors composed of GluR2 and GluR3 (GluR2/3) that cycle into and out of synapses constitutively.⁶ Protein levels of GluR2/3 are decreased in postmortem enterorhinal cortex, frontal cortex, and Purkinje cell samples from patients with sporadic Creutzfeldt-Jakob disease.⁷ GluR2/3 protein levels are increased on the dendrites of dentate granule cells in postmortem epileptogenic hippocampus samples from patients with temporal lobe epilepsy.⁸ Cayman's GluR2/3 Polyclonal Antibody can be used for Western blot (WB) applications. The antibody recognizes GluR2/3 at approximately 100 kDa from rat samples.

References

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WWW.CAYMANCHEM.COM