

GluA

Cat.No. 182 403; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: not tested yet IHC: 1 : 100 up to 1 : 500 (see remarks) IHC-P/FFPE: not tested yet EM: yes
Immunogen	Recombinant protein corresponding to AA 742 to 798 from rat GluA1 (UniProt Id: P19490)
Reactivity	Reacts with: human (P42261, P42262, P42263, P48058), rat (P19490, P19491, P19492, P19493), mouse (P23818, P23819, Q9Z2W9, Q9Z2W8). Other species not tested yet.
Specificity	Raised against GluA 1 but, due to sequence homology, likely to crossreact with GluA 2, 3, and 4.
Remarks	IHC: This antibody requires antigen retrieval with pepsin according to: Lorincz A & Nusser Z (2008). recommended protocol The antibody is also suitable for EM based replica technique.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Ionotropic **glutamate receptors (iGluRs)** mediate rapid excitatory neurotransmission in the mammalian CNS. They can be subdivided into three major groups, the **AMPA/GluA**, NMDA/GluN and kainate/GluK receptors (KARs). mRNAs coding for glutamate receptors are substrates for an adenosine deaminase acting on RNA (ADAR) that increases the diversity of these proteins. Glutamate receptors of the AMPA subtype are monovalent cation channels and are composed of the four AMPA subunits GluA 1, GluA 2, GluA 3, and GluA 4.

Selected References SYSY Antibodies

Objective quantification of nanoscale protein distributions.

Szoboszlai M, Kirizs T, Nusser Z

Scientific reports (2017) 7(1): 15240. **EM; tested species: mouse**

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PLoS one (2013) 8(5): e64423. **WB**

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The Journal of physiology (2014) : . **WB**

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Schmeisser MJ, Ey E, Wegener S, Bockmann J, Stempel AV, Kuebler A, Janssen AL, Udvardi PT, Shibani E, Spilker C, Balschun D, et al.

Nature (2012) 486(7402): 256-60. **WB**

Selected General References

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The AMPA receptor GluR2 C terminus can mediate a reversible, ATP-dependent interaction with NSF and alpha- and beta-SNAPs.

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Synaptic distribution of GluR2 in hippocampal GABAergic interneurons and pyramidal cells: a double-label immunogold analysis.

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