**Glycine receptor**

Cat.No. 146 011; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

### Data Sheet

<table>
<thead>
<tr>
<th>Reconstitution/Storage</th>
<th>100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 µl H2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>WB: 1 : 500 up to 1 : 1000 (AP staining), IHC: 1 : 250 (see remarks), IHC-P/FFPE: 1 : 500, ELISA: yes, FLOWCYTOMETRY: yes</td>
</tr>
<tr>
<td>Clone</td>
<td>mAb4a</td>
</tr>
<tr>
<td>Subtype</td>
<td>IgG1 (κ light chain)</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Recombinant protein corresponding to AA 1 to 457 from rat Glycine receptor a1 (UniProt Id: P07727)</td>
</tr>
<tr>
<td>Epitop</td>
<td>Epitop: AA 96 to 105 from rat Glycine receptor a1 (UniProt Id: P07727)</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Reacts with: human (P23415, P23416, P48167), rat (P07727, P22771, P20781), mouse (Q64018, Q7TN8, P48168), pig, zebrafish. Other species not tested yet.</td>
</tr>
<tr>
<td>Specificity</td>
<td>Specific for all glycine receptor subunits.</td>
</tr>
<tr>
<td>Remarks</td>
<td>IHC: Tissue sections require additional methanol/acetic acid treatment prior to antibody incubation. For details see Dumoulin A, Triller A &amp; Dieudonné S (2001). recommended protocol</td>
</tr>
</tbody>
</table>

### TO BE USED IN VITRO / FOR RESEARCH ONLY

NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The inhibitory glycine receptor (GlyR) is a member of the ligand-gated ion channel superfamily of neurotransmitter receptors. It is an oligomeric protein composed of homologous subunits (α-1-4 and β) with four transmembrane segments (M1-M4) each. It shows a widespread expression profile in brain. Several isoforms and splice variants with distinct pharmacology have been discovered so far.

### Selected References SYSY Antibodies

Distribution of the glycine receptor β-subunit in the mouse CNS as revealed by a novel monoclonal antibody. Weltzien F, Puller C, O’Sullivan GA, Paarmann I, Betz H


Slowly emerging glycine receptor enhancement inhibition in the sound localization pathway of the avian auditory system. Fischl MJ, Weimann SR, Kearse MG, Burger RM


Age-related changes of glycine receptor at the rat hippocampus: from the embryo to the adult. Aoreia RI, Ribeiro JA, Sebastião AM, Valente CA


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Cell biology international (2018) : . IHC; tested species: mouse


Alpha subunit-dependent glycine receptor clustering and regulation of synaptic numbers. Patrizio A, Renner M, Pizzarello R, Triller A, Speich CG


Loss of Neuroligin3 specifically downregulates retinal GABAα2 receptors without abolishing direction selectivity. Hoon M, Krishnamoorthy V, Gollisch T, Falkenburger B, Varoqueaux F

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Differential GABAergic and glycineric inputs of inhibitory interneurons and Purkinje cells to principal cells of the cerebellar nuclei. Husson Z, Rousseau CV, Broll I, Zeilhofer HU,Dieudonné S


Developmentally dynamic colocalization patterns of DSCAM with adhesion and synaptic proteins in the mouse retina. de Andrade GB, Kunzelman L, Merrill MM, Fuerst PG


Differential subcellular targeting of glutamate receptor subtypes during homeostatic synaptic plasticity. Soares C, Lee KF, Nassrallah W, Béïque JC


Developmentally dynamic colocalization patterns of DSCAM with adhesion and synaptic proteins in the mouse retina. de Andrade GB, Kunzelman L, Merrill MM, Fuerst PG

Molecular vision (2014) 20: 1422-33. IHC

Ethanol reduces neuronal excitability of lateral orbitofrontal cortex neurons via a glycine receptor dependent mechanism. Badanich KA, Mulholland PJ, Beckley JT, Trantham-Davidson H, Woodward JJ

Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology (2013) 38(7): 1176-88. WB

Differential subcellular targeting of glutamate receptor subtypes during homeostastic synaptic plasticity. Soares C, Lee KF, Nassrallah W, Béïque JC


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