

Glycine receptor α 1

Cat.No. 146 111; Monoclonal mouse antibody, 100 μ g purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μ g purified IgG, lyophilized. For reconstitution add 100 μ l H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: not recommended IP: yes ICC: 1 : 500 IHC: 1 : 500 (see remarks) IHC-P/FFPE: not recommended EM: yes FLOWCYTOMETRY: yes
Clone	mAb2b
Subtype	IgG1 (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 457 from rat Glycine receptor α 1 (UniProt Id: P07727)
Epitop	Epitop: AA 1 to 10 from rat Glycine receptor α 1 (UniProt Id: P07727)
Reactivity	Reacts with: human (P23415), rat (P07727), mouse (Q64018), pig, monkey. Other species not tested yet.
Specificity	Specific for the glycine receptor α 1-subunit.
Remarks	IHC: To improve signal strength antigen retrieval (10mM citrate, pH 6.0, overnight at 60°C) is highly recommended.

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

Differential distribution of glycine receptor subtypes at the rat calyx of Held synapse.
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The Journal of neuroscience : the official journal of the Society for Neuroscience (2012) 32(47): 17012-24. **IHC, EM**

Quantitative nanoscopy of inhibitory synapses: counting gephyrin molecules and receptor binding sites.
Specht CG, Izeddin I, Rodriguez PC, El Beheiry M, Rostaing P, Darzacq X, Dahan M, Triller A
Neuron (2013) 79(2): 308-21. **ICC, IHC; tested species: mouse**

Cochlear ablation in neonatal rats disrupts inhibitory transmission in the medial nucleus of the trapezoid body.
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Neuroscience letters (2019) : **IHC; tested species: rat**

3D Electrophysiological Measurements on Cells Embedded within Fiber-Reinforced Matrigel.
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Advanced healthcare materials (2019) : e1801226. **ICC; tested species: mouse**

GlyT1 determines the glycinergic phenotype of amacrine cells in the mouse retina.
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Brain structure & function (2018) : **IHC; tested species: mouse**

Loss of Neuroligin3 specifically downregulates retinal GABAA α 2 receptors without abolishing direction selectivity.
Hoon M, Krishnamoorthy V, Gollisch T, Falkenburger B, Varoqueaux F
PloS one (2017) 12(7): e0181011. **IHC; tested species: mouse**

The GlyR Extracellular β 8- β 9 Loop - A Functional Determinant of Agonist Potency.
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The Journal of neuroscience : the official journal of the Society for Neuroscience (2017) 37(33): 7948-7961. **IHC; tested species: mouse**

Transmitter inputs to different motoneuron subgroups in the oculomotor and trochlear nucleus in monkey.
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The Journal of neuroscience : the official journal of the Society for Neuroscience (2015) 35(1): 422-37. **ICC**

Morphology and connectivity of the small bistratified A8 amacrine cell in the mouse retina.
Lee SC, Meyer A, Schubert T, Hüser L, Dedek K, Haverkamp S
The Journal of comparative neurology (2015) 523(10): 1529-47. **IHC**

Gephyrin clusters are absent from small diameter primary afferent terminals despite the presence of GABA(A) receptors.
Lorenzo LE, Godin AG, Wang F, St-Louis M, Carbonetto S, Wiseman PW, Ribeiro-da-Silva A, De Koninck Y
The Journal of neuroscience : the official journal of the Society for Neuroscience (2014) 34(24): 8300-17. **IHC; tested species: rat**

The rod pathway of the microbat retina has bistratified rod bipolar cells and tristratified AII amacrine cells.
Müller B, Butz E, Peichl L, Haverkamp S
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Differential control of thrombospondin over synaptic glycine and AMPA receptors in spinal cord neurons.
Hennekinne L, Colasse S, Triller A, Renner M
The Journal of neuroscience : the official journal of the Society for Neuroscience (2013) 33(28): 11432-9. **ICC; tested species: rat**

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Schubert T, Hoon M, Euler T, Lukasiewicz PD, Wong RO
Neuron (2013) 78(1): 124-37. **IHC; tested species: mouse**

Selective glycine receptor α 2 subunit control of crossover inhibition between the on and off retinal pathways.
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