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 (α1-4 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.


Quantitative nanoscopy of inhibitory synapses: counting gephyrin molecules and receptor binding sites.
Specht CG, Izeddin I, Rodriguez PC, El Behery M, Rosati P, Daraczi X, Dahan M, Triller A


Glycine receptor is differentially expressed in the rat retina at early stages of streptozotocin-induced diabetes.

Neuroscience letters (2019) 712: 134506. WB; tested species: rat

Cochlear ablation in neonatal rats disrupts inhibitory transmission in the medial nucleus of the trapezoid body.

Neuroscience letters (2019) : IHC; tested species: rat

3D Electrophysiological Measurements on Cells Embedded within Fiber-Reinforced Matrigel.
Schaefer N, Janzen D, Bakiro E, Hryniewicz A, Dalton PD, Villmann C

Advanced healthcare materials (2019) : e1801226. IHC; tested species: mouse

GlYR1 determines the glycinergic phenotype of amacrine cells in the mouse retina.

Brain structure & function (2018) : 7948-7961. IHC; tested species: mouse

Janzen D, Schaefer N, Delto C, Schindelin H, Villmann C

Müller B, Butz E, Peichl L, Haverkamp S


Disruption of a Structurally Important Extracellular Element in the Glycinic Receptor Leads to Decreased Synaptic Integration and Signaling Resulting in Severe Stipple Disease.


Gephyrin clusters are absent from small diameter primary afferent terminals despite the presence of GABA(A) receptors.
Mariqueo TA, Agurto A, Muñoz B, San Martin L, Coronado C, Homanics GE, Aguayo LG

Advanced healthcare materials (2019) : e1801226. IHC; tested species: mouse

Effects of ethanol on glycinergic synaptic currents in mouse spinal cord neurons.

Neuroscience letters (2019) 712: 134506. WB; tested species: rat

The rod pathway of the microbat retina has bistratified rod bipolar cells and tristratified AII amacrine cells.


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