

Glycine receptor β

Cat.No. 146 211; Monoclonal mouse antibody, 100 μ g purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μ g purified IgG, lyophilized. Azide was added before lyophilization. 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 (see remarks) IP: not tested yet ICC: yes (methanol fixation) IHC: 1 : 500 up to 1 : 1000 (see remarks) IHC-P/FFPE: not tested yet
Clone	299E7
Subtype	IgG1 (κ light chain)
Immunogen	Recombinant protein corresponding to AA 336 to 455 from rat Glycine receptor β (UniProt Id: P20781)
Epitop	aa 336 - 355
Reactivity	Reacts with: rat (P20781), mouse (P48168), monkey. Other species not tested yet.
Specificity	Specific for the glycine receptor β -subunit.
Remarks	WB: Detection of overexpressed protein is possible. Endogenous levels are hardly detectable. IHC: Mild fixation for 10-15 min with cold 2 % PFA solution is recommended. Include 0,5 % triton X 100 in all blocking and antibody incubation steps.

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

The Journal of comparative neurology (2012) 520(17): 3962-81. **ICC, IHC**

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

Schaefer N, Berger A, van Brederode J, Zheng F, Zhang Y, Leacock S, Littau L, Jablonka S, Malhotra S, Topf M, Winter F, et al.

The Journal of neuroscience : the official journal of the Society for Neuroscience (2017) 37(33): 7948-7961. **WB; tested species: mouse**

Selected General References

Expression of glycine receptor alpha subunits and gephyrin in cultured spinal neurons.

Bechade C, Colin I, Kirsch J, Betz H, Triller A

The European journal of neuroscience (1996) 8(2): 429-35.

The glycine receptor deficiency of the mutant mouse spastic: evidence for normal glycine receptor structure and localization.

Becker CM, Hermans-Borgmeyer I, Schmitt B, Betz H

The Journal of neuroscience : the official journal of the Society for Neuroscience (1986) 6(5): 1358-64.

Identification of glycinergic synapses in the cochlear nucleus through immunocytochemical localization of the postsynaptic receptor.

Altschuler RA, Betz H, Parakkal MH, Reeks KA, Wenthold RJ

Brain research (1986) 369(1-2): 316-20.

Distribution of glycine receptors at central synapses: an immunoelectron microscopy study.

Triller A, Cluzaud F, Pfeiffer F, Betz H, Korn H

The Journal of cell biology (1985) 101(2): 683-8.

Purification and characterization of the glycine receptor of pig spinal cord.

Graham D, Pfeiffer F, Simler R, Betz H

Biochemistry (1985) 24(4): 990-4.