

Glycine receptor

Cat.No. 146 308; Recombinant Guinea pig antibody, 50 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg purified IgG, lyophilized. 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 : 500 (see remarks) IHC-P/FFPE: not tested yet
Clone	GpmAb4a
Subtype	IgG2 (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 457 from rat Glycine receptor α1 (UniProt Id: P07727)
Epitop	Epitop: AA 96 to 105 from rat Glycine receptor α1 (UniProt Id: P07727)
Reactivity	Reacts with: human (P23415, P23416, P48167), rat (P07727, P22771, P20781), mouse (Q64018, Q7TNC8, P48168), pig, zebrafish. Other species not tested yet.
Specificity	Specific for all glycine receptor subunits.
Remarks	This antibody is a chimeric antibody based on the well known monoclonal mouse antibody mAb4a. The constant regions of the heavy and light chains have been replaced with Guinea pig specific sequences. The antibody can therefore be used with standard anti-Guinea pig secondary reagents. It also carries a Strep-tag at the C-terminus of the heavy chain. The antibody has been expressed in mammalian cells. IHC: Tissue sections require additional methanol/acetic acid treatment prior to antibody incubation. For details see Dumoulin A, Triller A & Dieudonné S (2001). recommended protocol

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.

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.