Synaptic Systems

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Glycine receptor

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

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized, biotin-labeled. . For reconstitution add 100 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 500 up to 1 : 1000 (AP staining) **IP**: yes **ICC**: yes **IHC**: 1 : 250 up to 1 : 500 (see remarks) **IHC-P/FFPE**: not tested yet **ELISA**: yes
Label	biotin
Clone	mAb4a
Subtype	IgG1 (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	**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

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 General References

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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.
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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, Cluzeaud 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.