

Product datasheet for **TA328847**

Gla1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)RHHKSPMLNLFQD, corresponding to amino acid residues 350-362 of rat GlyRa1. 2nd intracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	glycine receptor, alpha 1
Database Link:	NP_037265 Entrez Gene 14654 Mouse Entrez Gene 25674 Rat P07727



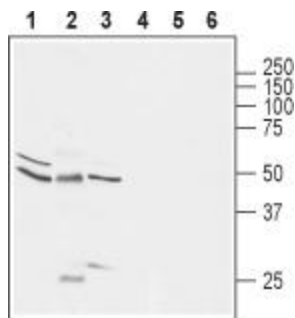
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Background:

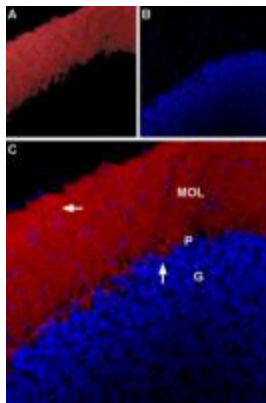
Glycine receptors (GlyRs) mediate ionotropic inhibitory neurotransmission in the CNS where they play an essential role in inhibition of motor neurons in the spinal cord and brainstem. The glycine receptor is composed of three ligand-binding subunits of 48 kDa (α) and two homologous polypeptides of 58 kDa (β) that span the postsynaptic membrane in a pentameric arrangement to form a Cl^- -selective channel. So far, at least three different α -subunit variants of the GlyR have been identified: $\alpha 1$, $\alpha 2$ and $\alpha 3$. Homo-oligomeric $\alpha 2$ receptors have a low strychnine-binding affinity and are considered to represent a neonatal form of GlyR, which is replaced during development by receptors containing the $\alpha 1$ subunit. Adult GlyRs are predominantly composed of $\alpha 1$ and β subunits, the $\alpha 3$ subunit being expressed at low levels in only a few brain regions. GlyRa1 subunits are widely expressed and contribute to many processes in the CNS, including inflammatory pain perception, modulation of auditory and visual pathways, and neurotransmission in the cerebellar cortex. Mutations in glycine receptor $\alpha 1$ subunits cause human hereditary hyperekplexia, a disorder characterized by an exaggerated startle response, which is a consequence of the role of GlyRs in motor reflex circuits of the spinal cord.

Synonyms:

MGC138878; MGC138879; STHE

Product images:


Western blot analysis of rat DRG (lanes 1 and 4), mouse brain (lanes 2 and 5) and rat brain (lanes 3 and 6): 1-3. Anti-Glycine Receptor $\alpha 1$ antibody, (1:400). 4-6. Anti-Glycine Receptor $\alpha 1$ antibody, preincubated with the control peptide antigen.



Expression of Glycine Receptor $\alpha 1$ in rat cerebellum. Immunohistochemical staining of rat cerebellum using Anti-Glycine Receptor $\alpha 1$ antibody, (1:100). A. Glycine Receptor $\alpha 1$ staining (red) is revealed in the molecular layer (MOL), Bergmann glia (horizontal arrow) and in Purkinje cells (a vertical arrow). B. Nuclear staining using DAPI as the counterstain (blue). C. Merged images of A and B.