

DESCRIPTION

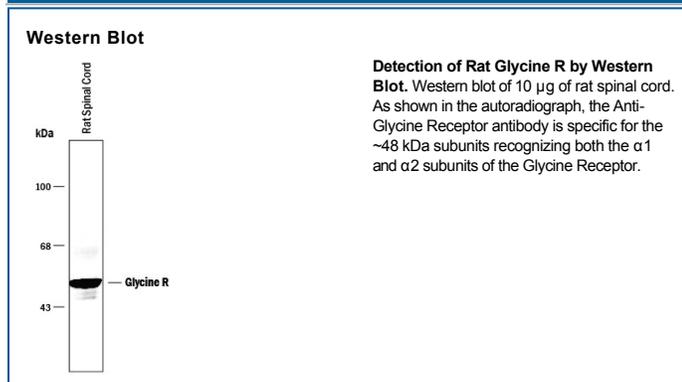
Species Reactivity	Rat
Specificity	Specific for the ~48 kDa $\alpha 1$ and $\alpha 2$ subunits of the Glycine Receptor in Western blots of rat spinal cord, brain stem and cell extracts. Immunolabeling is blocked by preadsorption of antibody with the peptide immunogen. This antibody does not recognize other Glycine Receptor subunits.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Peptide from the N-terminus region of the $\alpha 1$ subunit of the rat Glycine Receptor
Formulation	Lyophilized in 5 mM ammonium bicarbonate See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1:1000 dilution	See Below
Immunohistochemistry	1:1000 dilution	Frozen sections; unpublished observations, 1:1000

DATA



PREPARATION AND STORAGE

Reconstitution	This antibody should be reconstituted in 100 μ L phosphate buffered saline (137 mM NaCl, 7.5 mM Na ₂ HPO ₄ , 2.7 mM KCl, 1.5 mM KH ₂ PO ₄ , pH 7.4) before use.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	The lyophilized product is stable at $\leq -20^{\circ}$ C for at least 1 year. After reconstitution the antibody should be aliquoted and stored at $\leq -20^{\circ}$ C.

BACKGROUND

The rat glycine receptor (GlyR) chloride channel is a member of the nicotinic acetylcholine receptor family of ligand-gated ion channels. Its glycine-mediated activation results in an influx of chloride ions that hyperpolarize and desensitize neuronal postsynaptic membranes. The receptor's multimeric makeup is unclear. It may be either a three or five subunit homo- or heteromultimer. To date, there are five rat GlyR subunit types. Four are 48-53 kDa α -type subunits, and one is a 58 kDa β -type subunit. Alternate splicing exists for $\alpha 1$ and $\alpha 2$ subunit types. Alpha-type subunits may form homotrimers; however, their function may not be neurotransmission but rather non-synaptic cell-cell communication. Alpha1- β multimers may be the principal synaptic GlyR in adults.