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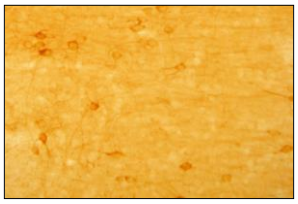
Antibodies that Shine



IHC image of neurons in rat cortex.

GluR1 (Ionotropic Glutamate Receptor 1) Antibody

Catalog #	**24439**	**Product type**	Primary antibodies
Lot #	**014013A**	**Clonality**	Polyclonal
Form	Lyophilized whole serum (100 µL)	**Isotype**	IgG
Host	Rabbit	**Preservative**	≤ 0.09% sodium azide
Reacts With	Rat	**Antigen**	C-terminal synthetic peptide sequence corresponding to amino acids (894-907) of rat GluR1 coupled to bovine thyroglobulin (BTg) with glutaraldehyde.

INSTRUCTIONS

Preparation	Do not reconstitute until ready to use since the product is most stable when lyophilized. The product does not need to be kept cooled during shipping; however, for long-term storage, store lyophilized antibody until ready to use at -15ºC or lower. Reconstitute with 100 µL of distilled or deionized water. After reconstitution use immediately or refrigerate at 2º–8ºC. To avoid freeze/thaw cycles, dilute unused antibody with PBS or Tris buffer at a dilution no higher than 1/10, then aliquot and freeze at -15ºC or lower. Refer to the Instruction Manual available online at www.immunostar.com for information on tissue preparation, immunostaining techniques, troubleshooting, and formulas.

APPLICATION

IHC Quality Control	The antibody produces significant labeling of GluR1 at dilutions of 1/4,000–1/8,000 using biotin-avidin peroxidase technique in rat cortex and hippocampus. Optimal dilution will vary depending upon fixation, labeling technique and/or detection system; therefore, a dilution series is recommended. Using western blot analysis of GluR1 transfected cells and rat brain homogenates the antibody specifically labels a single band at approximately 102 kD. Western blot analysis of GluR2, 3, 4, 4C, 5, 6, and 7 transfected cells revealed no immunolabeling. Immunolabeling of the above non-NMDA transfected cells demonstrates specificity for GluR1. Additionally, immunolabeling for GluR1 is completely abolished by preadsorption with synthetic rat GluR1 (894–907) at 5 µg per mL of diluted antibody
Tissue	Rat cortex and hippocampus
Perfusion Fixation	• Fixative - 4% paraformaldehyde in 0.1M Phosphate buffer, pH 7.4; 500 mL over 20 min. • Post fixation - 1.5 hour at 4°C in 4% paraformaldehyde in 0.1M phosphate buffer, pH 7.4. . • Note: If needed, low levels of glutaraldehyde (0.1–0.3%) may be used in conjunction with paraformaldehyde.
Sections	10 µm cryostat or 50 µm vibratome
Tissue Incubation	18–24 hours at 2°–8°C
Detection System	Use Bn/AV-HRP reagents at dilutions recommended by the manufacturer.
Suggested Dilution	1/4,000–1/8,000 in PBS/0.3% Triton X-100 - Bn/AV-HRP technique

NOTES

Special Instructions	It is recommended that the researcher perform a primary antibody dilution series using our dilution recommendations as a guideline. Note that a change in the fixation or buffering system from our protocol may change the configuration of the protein which could alter the reactivity with the tissue tested.
Storage	After reconstitution, use immediately or refrigerate at 2°–8ºC up to 2 days. For long-term storage, aliquot and freeze at -15°C or lower. Avoid repeated freeze/thaw cycles.
Concentration	Not applicable. Antibody concentration is only relevant for purified antibodies.
Journal References	www.immunostar.com/publications