



IHC image of neurons in rat cortex.

Neuropeptide Y (NPY) Antibody

Catalog #	22940	Product type	Primary antibodies
Lot #	1952001	Clonality	Polyclonal
Form	Lyophilized whole serum (100 µL)	Isotype	IgG
Host	Rabbit	Preservative	≤ 0.09% sodium azide
Reacts With	Bird, Cat, Ferret, Fish, Frog, Squirrel, Guinea Pig, Hamster, Human, Llama, Monkey, Mouse, Pig, Rat, Sheep, Snake Tadpole, Toad, Turtle, Water Buffalo	Antigen	Neuropeptide Y coupled to bovine thyroglobulin (BTg) with glutaraldehyde

INSTRUCTIONS

Introduction	Neuropeptide Y (NPY) is a member of a regulatory peptide family and has marked sequence homology with pancreatic polypeptide (PP) and peptide YY (PYY), which are other members of the family. In the rat central nervous system, immunohistochemistry has found NPY-like cell bodies in the cortex, caudate-putamen, hypothalamus (arcuate nucleus), hippocampus, anterior olfactory bulb, nucleus accumbens, amygdaloid complex and periaqueductal grey. NPY-like fibers and terminals are detected in high numbers in the bed nucleus of the stria terminalis, the peri- and paraventricular regions of the hypothalamus and thalamus and in discrete hypothalamic nuclei, particularly the suprachiasmatic nucleus.
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 -15°C or lower. Reconstitute with 100 µL of distilled or deionized water. After reconstitution, use immediately or refrigerate at 2°–8°C. 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 -15°C 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	In rat central nervous system, the antiserum has significant staining with a very low background at a 1/5,000 –1/10,000 dilution using the Biotin-Streptavidin/HRP detection method. All staining is blocked by preabsorption of the diluted antiserum with excess NPY. Cross reactivity experiments in which diluted NPY antiserum was absorbed with excess peptide YY, avian pancreatic polypeptide, B-endorphin, vasoactive intestinal peptide, cholecystokinin or somatostatin showed no affect in blocking the intensity of staining.
Tissue	Rat paraventricular nucleus, cortex and caudate putamen
Perfusion Fixation	<ul style="list-style-type: none"> Fixative: 4% paraformaldehyde in 0.1 M phosphate buffer, pH 7.4; 500 mL over 20-30 min. Post Fixation: 1.5 hr. at 4°C in 4% paraformaldehyde in 0.1 M phosphate buffer, pH 7.4.
Sections	10 µm cryostat or 50 µm vibratome
Tissue Incubation	18–24 hours at 2°–8°C.
Detection System	Bn/Av-HRP at dilutions recommended by the manufacturer.
Suggested Dilution	1/5,000 –1/10,000 in PBS/0.3% Triton X-100 - Bn/Av-HRP immunohistochemistry

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°–8°C up to 2 days. For long-term storage, aliquot antibody and freeze at -15°C or lower. Avoid repeated freeze/thaw cycles
Concentration	Not applicable. Antibody concentration is only relevant for purified antibodies.
Journal Articles	www.immunostar.com/publications

For Laboratory Reagent Use Only. Analytical and performance characteristics are not established.

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