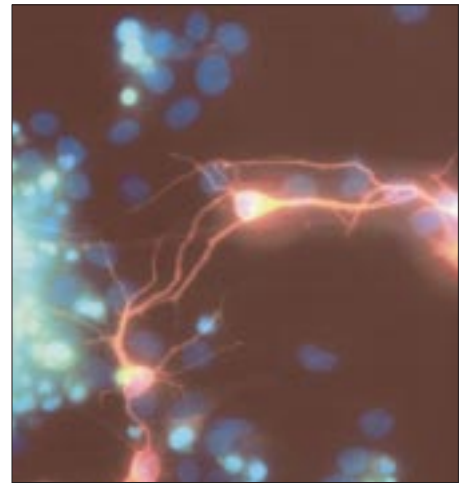


◀ **Anti-β-Galactosidase mAb**

The *Drosophila reaper (rpr)* and *hid* (head involution defective) cell death genes act cooperatively to induce programmed cell death of embryonic CNS midline cells. The Promega Anti-β-Galactosidase mAb (Cat.# Z3781) was used at a 1:800 dilution to detect *lacZ* expression in *Drosophila* embryos where expression of *lacZ* alone (A), or in combination with *reaper* and/or *hid* (B-F), was targeted to the CNS midline. Note the normal array of CNS midline glia (arrow) and VUM neurons (arrow-head) in wild-type embryos (A), as well as in embryos expressing two doses of only *reaper* (B) or *hid* (C). A dosage-sensitive killing of midline glia and neurons was observed when *reaper* and *hid* were co-expressed (D, E). Both the ectopic and normal midline cell deaths were blocked by co-expression of p35, a baculovirus caspase inhibitor (F). Details on embryo isolation and staining can be found in Zhou, L. *et al.* (1997) *Proc. Natl. Acad. Sci. USA* **94**, 5131.

Images kindly provided by Dr. John Nambu, University of Massachusetts. Reprinted by permission of the National Academy of Sciences.

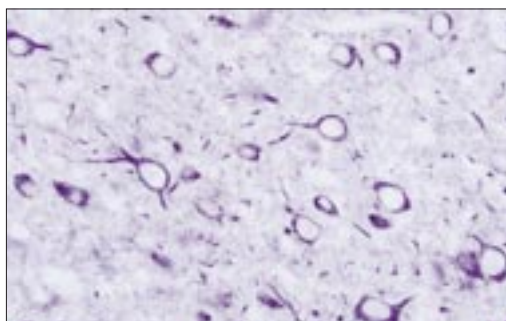


▲ **Anti-βIII Tubulin mAb & Apoptosis Detection System, Fluorescein**

Rat neural progenitor cells are shown migrating away from a spherical cluster of apoptotic cells. The condensed green nuclei contain fragmented DNA, as indicated by fluorescent labeling with the Apoptosis Detection System, Fluorescein (Cat.# G3250). The larger viable nuclei (blue) were counterstained with DAPI. The cells were also processed for immunocytochemical staining with neuron-specific Anti-βIII Tubulin mAb (Cat.# G7121) and Cy3™-conjugated secondary antibody. Immature, process-bearing neurons (red) are distinctly labeled. Protocols developed and performed at Promega.

**Reagents**

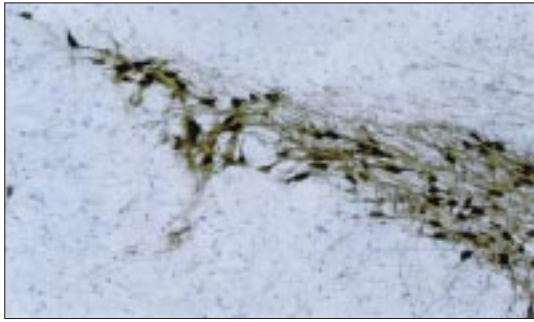
Product	Size	Cat.#
DeadEnd™ Colometric Apoptosis Detection System	40 reactions	G7130
Apoptosis Detection System, Fluorescein	60 reactions	G3250
Anti-βIII Tubulin mAb	100µg	G7121
Anti-β-Galactosidase mAb	100µg	Z3781
GDNF E <sub>max</sub> ™ ImmunoAssay System	5 x 96 wells	G3240
	2 x 96 wells	G3520
mNGF, 2.5S	100µg	G5141
	10µg	G5142
mNGF, 7S	100µg	G5151



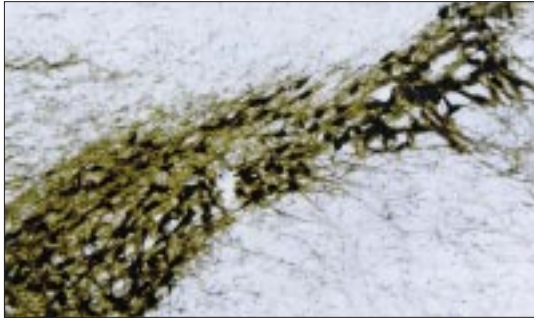
◀ **Anti-βIII Tubulin mAb**

Cryosectioned adult rat brain stained for βIII tubulin using Anti-βIII Tubulin mAb (Cat.# G7121). Brains were fixed by perfusion with a mixture of paraformaldehyde and glutaraldehyde and were sectioned at 30µm with a vibrating blade microtome. The photomicrograph shows neurons in the ventral posteromedial nucleus of the thalamus that are immunopositive for βIII tubulin. Sections first were incubated overnight at 4°C in the primary antibody (1:16,000) and then were incubated with a biotinylated secondary antibody for 2 hours, reacted with avidin-horseradish peroxidase and visualized using VIP (Vector Laboratories) as a chromogen. The reaction product is intense, and densely fills the cytoplasm of neuronal cell somas and their dendrites, providing a permanent record of their identity.

Image kindly provided by Dr. Ronald Kalil, University of Wisconsin. Immunocytochemical staining was performed by Ms. Pallavi Gopal.



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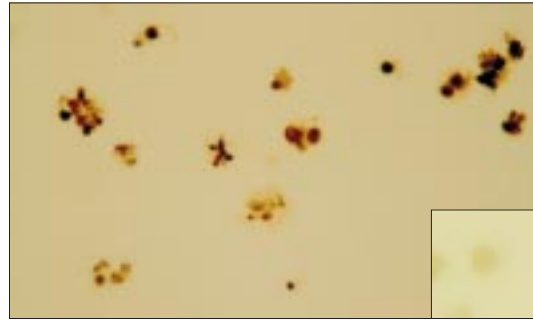


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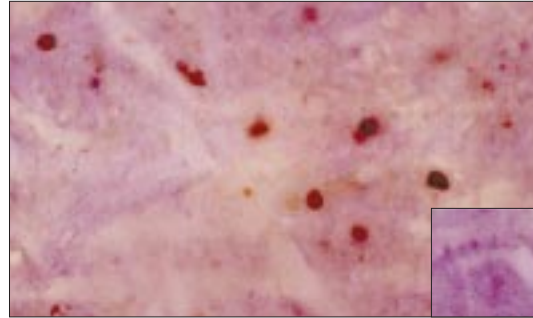
▲ GDNF E<sub>max</sub><sup>TM</sup> ImmunoAssay System

Micrographs showing TH-IR staining in the pars compacta of the substantia nigra one week after medial forebrain bundle axotomy. Animals received GDNF implants; GDNF release from polymer encapsulated cells was measured using the GDNF E<sub>max</sub><sup>TM</sup> ImmunoAssay System (Cat.# G3240). Panels show staining in the nonlesioned (upper) and in the lesioned (lower) sides. Details on the procedures can be found in Tseng, J.L. *et al.* (1997) *J. Neurosci.* **17**, 329.

Images kindly provided by Dr. Patrick Aebischer, Lausanne University Medical School. Reprinted by permission of *The Journal of Neuroscience*.



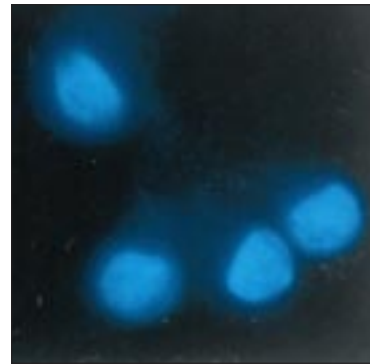
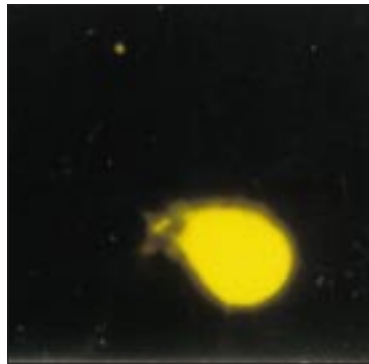
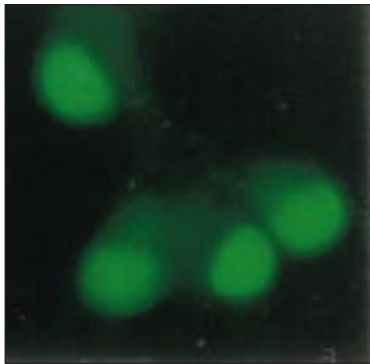
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▲ DeadEnd<sup>TM</sup> Colorimetric Apoptosis Detection System

Detection of apoptosis in cells and tissues using the new DeadEnd<sup>TM</sup> Apoptosis System (Cat.# G7130). HL-60 cells were treated with anisomycin to induce apoptosis (upper) or rats were lesioned in the visual cortex to induce neuronal death in the lateral geniculate nucleus (lower). Control treatment for cells (no anisomycin) and tissues (contralateral to lesion) are shown as insets with images. Protocols developed and performed at Promega. See page 9 of this issue of *Neural Notes* for more information on this new product and the applications article beginning on page 5.



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▲ mNGF

Activated PI 3-kinase does not affect the expression of c-Jun after NGF (Cat.# G5141, G5151) withdrawal. Superior cervical ganglion cells injected with PI 3-kinase, withdrawn from NGF (100ng/ml) and stained for phospho-c-Jun (left panel) or guinea pig IgG (middle panel), or incubated with Hoechst nuclear stain (right panel).

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