

# Human/Mouse/Rat Neural 3-Color Immunocytochemistry Kit

Catalog Number: SC024  
Size: 25 Tests

## INTENDED USE

This product is designed for the immunocytochemical analysis of neural cells (including neurons, astrocytes, and oligodendrocytes) using three fluorochrome-conjugated antibodies.

## PRODUCT DESCRIPTION

This kit contains three fluorochrome-conjugated antibodies that can be used for single-step immunocytochemical staining of human/mouse/rat neural cells (including  $\beta$ III Tubulin, Neurons; GFAP, Astrocytes; and Oligodendrocyte Marker O4, Oligodendrocytes). Each antibody is supplied as 125  $\mu$ L of a 10X solution in PBS containing 0.1% sodium azide.

This package insert must be read in its entirety before using this product.  
For research use only. Not for use in diagnostic procedures.

---

### MANUFACTURED AND DISTRIBUTED BY:

#### USA & Canada | R&D Systems, Inc.

614 McKinley Place NE, Minneapolis, MN 55413, USA  
TEL: (800) 343-7475 (612) 379-2956 FAX: (612) 656-4400  
E-MAIL: info@RnDSystems.com

### DISTRIBUTED BY:

#### UK & Europe | R&D Systems Europe, Ltd.

19 Barton Lane, Abingdon Science Park, Abingdon OX14 3NB, UK  
TEL: +44 (0)1235 529449 FAX: +44 (0)1235 533420  
E-MAIL: info@RnDSystems.co.uk

#### China | R&D Systems China Co., Ltd.

24A1 Hua Min Empire Plaza, 726 West Yan An Road, Shanghai PRC 200050  
TEL: +86 (21) 52380373 FAX: +86 (21) 52371001  
E-MAIL: info@RnDSystemsChina.com.cn

---

## MATERIALS PROVIDED & STORAGE CONDITIONS

Store the unopened kit at 2-8 °C **in the dark**.

Use within 6 months of receipt.

PART	PART #	DESCRIPTION
Anti-Oligodendrocyte Marker O4 NL557-Conjugated Mouse IgM	967188	125 µL of a 10X solution in PBS containing < 0.1% sodium azide.
Anti-βIII Tubulin NL637-Conjugated Mouse IgG <sub>2A</sub>	967189	
Anti-GFAP NL493-Conjugated Sheep IgG	967190	

## SPECTRAL CHARACTERISTICS

The spectral characteristics of each of the fluorochromes used are described below.

Fluorochrome	Absorption Maximum (nm)	Emission Maximum (nm)
NL493	493	514
NL557	557	574
NL637	637	658

## PRECAUTIONS

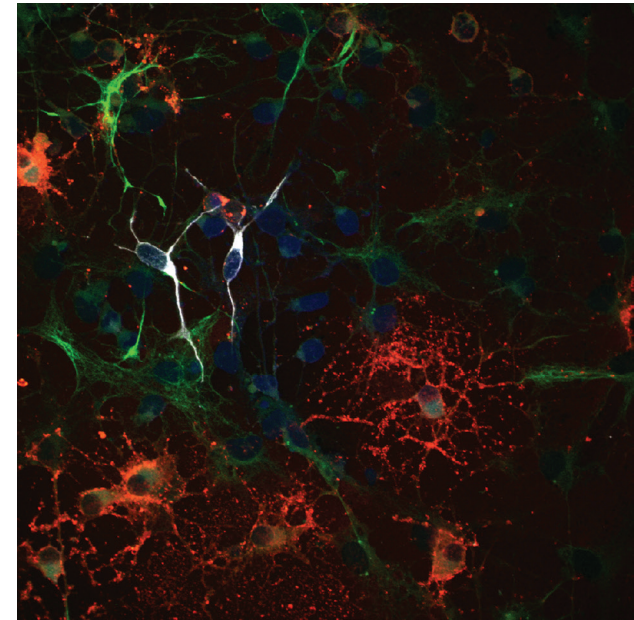
Sodium azide may react with lead and copper plumbing to form explosive metallic azides. Flush with large volumes of water during disposal.

Wear protective gloves, clothing, eye, and face protection. Wash hands thoroughly after handling. Refer to the MSDS on our website prior to use.

## IMMUNOCYTOCHEMISTRY VALIDATION

These antibodies have been tested for immunocytochemical staining using 7 day differentiated rat cortical stem cells. Cells were fixed in PBS containing 4% paraformaldehyde and blocked with PBS containing 10% normal donkey serum and 1% BSA. After blocking, cells were incubated with all three conjugated antibodies, each at a final concentration of 1X (1:10 dilution), in blocking buffer for 3 hours at room temperature **in the dark**. Between each step, cells were washed with PBS containing BSA. When using a staining volume of 50 µL, this kit contains sufficient material for 25 tests.

## DATA EXAMPLES



**Figure 1:** 7 day differentiated rat cortical stem cells were simultaneously stained with Northern Lights™ (NL) 637-conjugated βIII Tubulin (gray), NL493-conjugated GFAP (green), and NL557-conjugated Oligodendrocyte Marker O4 (red). All nuclei were stained with DAPI (blue).