



# NorthernLights™ Guard Mounting Media

## ORDERING INFORMATION

**Catalog Number:** NL996

**Size:** 5.5 mL

**Storage:** ≤ -20° C

## Description

NorthernLights Guard is a ready to use mounting medium which significantly extends the light-emitting capacity of fluorescent dyes which tend to fade during storage and microscopy examination. NorthernLights Guard can be used for various applications including, but not limited to, fluorescence immunohistochemistry and immunocytochemistry, fluorescence neuronal tracing, and fluorescence *in situ* hybridization. NorthernLights Guard media is compatible with cryostat and paraffin-embedded tissue sections, as well as with cultured neuronal and non-neuronal cells. Unlike other types of mounting media, NorthernLights Guard protects cells and tissues from shrinking, thus maintaining their native cytological and histological architecture, which is of critical importance for accurate image analysis studies.

NorthernLights Guard blocks the fading of a large variety of fluorescent dyes within a broad range of excitation and emission spectra making this mounting medium a reagent of choice for maintaining brightness of multi-color fluorescence samples during storage and analysis by either conventional fluorescence or laser confocal microscopy.

## Storage and Stability

Store NorthernLights Guard at ≤ -20° C, and protect from light. After opening the vial, NorthernLights Guard retains its properties for at least six months if handled properly. Return NorthernLights Guard to ≤ -20° C immediately after the mounting procedure is completed.

## Precautions

- Avoid eye and skin contact. Wear gloves and a lab coat.
- Do not aspirate NorthernLights Guard using mouth-controlled pipettes.

## Protocol

When cell and tissue samples are ready for coverslipping and/or microscopy analysis, the following procedure may be used.

1. Remove NorthernLights Guard from the freezer, and leave it at room temperature for 10 - 15 minutes to reduce its viscosity. Avoid exposure to direct light.

**Note:** Do not heat NorthernLights Guard to speed the warming process. Heating may impair its anti-fade activity.

2. Mounting Procedures

- a. Histological Slides

Aspirate the amount of medium needed to cover the entire tissue section or cells on the slide. This typically requires 30 - 40  $\mu\text{L}/\text{cm}^2$  of sample area. Apply NorthernLights Guard, and place the coverslip. Gently wipe excess mounting medium with a soft paper towel, or position the slides vertically on their long side for 1 - 2 minutes to drain excess mounting medium. Dispense NorthernLights Guard with either disposable transfer pipettes or glass Pasteur pipettes. Alternatively, plastic tips for repeat pipettors can be trimmed with scissors or a razor blade to create a wider opening for easier aspiration.

- b. Multi-well Culture Plates

Add NorthernLights Guard directly into the wells so the cells are completely covered. Refer to the table below to determine the recommended amount of mounting medium needed per well for various plate formats.

96-well	50 $\mu\text{L}/\text{well}$
24-well	200 - 300 $\mu\text{L}/\text{well}$
12-well	400 - 500 $\mu\text{L}/\text{well}$
6-well	1.0 - 1.3 mL/well

3. Samples are now ready for fluorescence and confocal microscopy examination and long-term storage.
4. NorthernLights Guard mounted samples need to be stored in a horizontal position at ≤ -20° C. Histological slides can be stored in slide trays. Samples in culture plates also need to be stored at ≤ -20° C in a horizontal position. It is recommended that culture plates be covered with aluminum foil to protect them from light.