ambion
by life technologies

# NorthernMax®-Gly Sample Loading Dye

**Catalog Number** AM8551

**Pub. No.** 4386612 **Rev.** B

| Contents | Quantity | Storage conditions |
|---|---|---|
| NorthernMax®-Gly Sample Loading Dye | 6 x 1 mL tube | Store at —20°C |

**WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from **www.lifetechnologies.com/support**.

## Product description

NorthernMax®-Gly Sample Loading Dye is an RNase-free buffer for RNA sample denaturation in any glyoxalgel protocol. This Sample Loading Dye is the same high quality loading dye available in the NorthernMax®-Gly Kit (Cat. no. AM1946).

Ethidium bromide and Bromophenol Blue are premixed into the solution. Use in conjunction with NorthernMax®-Gly Gel Prep/Running Buffer (Cat. no. AM8678) to give improved resolution of RNA on agarose gels. NorthernMax®-Gly Sample Loading Dye is also compatible with formaldehyde gels.

## Using NorthernMax®-Gly Sample Loading Dye

1. Add one volume of RNA (up to 30 µg total RNA or poly(A) RNA), in water or buffer, to 0.5–1 volume NorthernMax®-Gly Sample Loading Buffer. Gel markers should be treated similarly. Do not exceed the volume capacity of your wells.
2. Incubate samples for 30 min at 50°C. If less than one volume of Loading Buffer was used, increase the incubation time to one hour. During this incubation, the RNA is denatured and becomes glyoxylated, which prevents formation of secondary structure.
3. Spin tubes briefly and place on ice.
   (Optional) Samples may be stored at –20°C for several days before electrophoresis.
4. Load the samples on an agarose gel using RNase-free pipette tips.
   To keep the samples as dense as possible, make sure there is no air trapped in the end of the pipette tip, place the tip just inside the top of the well, expel the sample slowly, then gently raise the tip out of the well.
5. Run the gel at 5 V/cm, measured between electrodes.
6. In general, stop electrophoresis when the bromophenol blue dye front (corresponding to approximately 500 nt) has migrated approximately 3/4 the length of the gel.
7. If desired, visualize nucleic acid and/or markers with UV fluorescence before transfer.

   **Note:** As the mass amount of RNA is incrementally increased (from 5 µg to 30 µg), the mobility of the ribosomal RNA bands generally decreases slightly.

## Quality control

**Functional testing:** Glyoxal Load Dye is functionally tested using the NorthernMax®-Gly Kit (Cat. no. AM1946).

## Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at **www.lifetechnologies.com/termsandconditions**. If you have any questions, please contact Life Technologies at **www.lifetechnologies.com/support**.

**For Research Use Only. Not for use in diagnostic procedures.**

The information in this guide is subject to change without notice.



For support visit **lifetechnologies.com/support** or email **techsupport@lifetech.com**

lifetechnologies.com

21 January 2013

life technologies™