

Gel Loading Solution (All Purpose, Native Agarose)

Store at -20°C .

Catalog #:	AM8556
Volume:	1.4 mL
Appearance:	Dark blue solution
Storage Conditions:	Store at -20°C .

USER INFORMATION

Product Description: Ambion[®] Gel Loading Solution is an all-purpose 10X Gel Loading Solution containing 40% sucrose, 0.17% Xylene Cyanol and 0.17% Bromophenol Blue, for native agarose electrophoresis.

Applications:

To use with native agarose gels

1. The sample nucleic acid should be suspended in nuclease-free water in a volume not than 9/10 of the capacity of the wells. Otherwise, precipitate the nucleic acid and resuspend in a smaller volume.
2. Add 1/10 volume of Gel Loading Solution to the sample nucleic acid.
3. (Optional) At this point, ethidium bromide may be added to the samples to a final concentration of 10–50 $\mu\text{g}/\text{mL}$ in order to visualize the nucleic acid directly during and after electrophoresis.
4. Load samples on the gel using nuclease-free pipette tips. To keep the samples as dense as possible while loading, 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, and then gently raise the pipette tip out of the well.
5. Run the gel at 5 V/cm, measured between the electrodes. In general, stop the run when the bromophenol blue dye has migrated almost to the end of the gel.
6. 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.

Visit http://www.ambion.com/techlib/append/supp/rna_gel.html for protocols for agarose gel electrophoresis of RNA.

QUALITY CONTROL

Nonspecific Endonuclease Activity:	Meets or exceeds specification when a sample is incubated for 14–16 hr with 300 ng supercoiled plasmid DNA and analyzed by agarose gel electrophoresis.
Exonuclease Activity:	Meets or exceeds specification when a sample is incubated for 14–16 hr with 40 ng ^{32}P -labeled <i>Sau3A</i> fragments of pUC19 and analyzed by PAGE.
RNase Activity:	Meets or exceeds specification when a sample is incubated for 14–16 hr with 25 ng ^{32}P -labeled RNA and analyzed by PAGE.
Functional Testing:	Using Gel Loading Solution, low and high molecular weight markers and plasmid DNA are analyzed on a 1% Agarose-LE (Cat #AM9040) gel in 1X TBE. All samples yield bands that are sharp and intact.

OTHER INFORMATION

Material Safety Data Sheets: Material Safety Data Sheets (MSDSs) can be printed or downloaded from product-specific links on our website at the following address: www.ambion.com/techlib/msds. Alternatively, e-mail your request to MSDS_Inquiry_CCRM@appliedbiosystems.com. Specify the catalog or part number(s) of the product(s), and we will e-mail the associated MSDSs unless you specify a preference for fax delivery. For customers without access to the internet or fax, our technical service department can fulfill MSDS requests placed by telephone or postal mail. (Requests for postal delivery require 1–2 weeks for processing.)

Warranty and Liability:

For research use only. Not for use in diagnostic procedures.

Applied Biosystems is committed to delivering superior product quality and performance, supported by industry-leading global service and technical support teams. Warranty information for the accompanying consumable product is available at www.ambion.com/info/warranty in "Limited Warranty for Consumables," which is subject to the exclusions, conditions, exceptions, and limitations set forth under the caption "EXCLUSIONS, CONDITIONS, EXCEPTIONS, AND LIMITATIONS" in the full warranty statement. Please contact Applied Biosystems if you have any questions about our warranties or would like information about post-warranty support.

Information in this document is subject to change without notice. Applied Biosystems assumes no responsibility for any errors that may appear in this document.

Applied Biosystems disclaims all warranties with respect to this document, expressed or implied, including but not limited to those of merchantability or fitness for a particular purpose. In no event shall Applied Biosystems be liable, whether in contract, tort, warranty, or under any statute or on any other basis for special, incidental, indirect, punitive, multiple or consequential damages in connection with or arising from this document, including but not limited to the use thereof.

**Trademarks, Patents, and
Licensing:**

Applied Biosystems, AB (Design), and Ambion are registered trademarks of Applied Biosystems Corporation or its subsidiaries in the US and/or certain other countries. All other trademarks are the sole property of their respective owners.

© 2007 Ambion, Inc. All rights reserved. 4386614A