

GelStar™ Nucleic Acid Gel Stain

Filter Selection Tables

Introduction

GelStar™ Gel Stain represents the latest advance in nucleic acid staining technology. This high performance dye allows sensitive fluorescent detection of DNA and RNA using a standard 300 nm UV transilluminator following gel electrophoresis. Alternatively, systems using laser excitation can be used. Gels can be documented with either Polaroid® or CCD-based camera systems. The charts below will assist you in choosing the best filter for your particular system.

Recommended filters for non-CCD based systems

Documentation System	Recommended Camera Filter	Other Suitable Camera Filters
Polaroid® type 667, 57 or 55 film using a gelatin filter	GelStar™ Filter (Wratten® #9 filter) available from Lonza Rockland, Inc., catalog number 50536. This is a 75 x 75 mm gelatin filter that can be cut to size. For threaded glass filters will result in some loss filters, see below.	Ethidium Bromide (Wratten® #22 filter plus UV filter) or SYBR® green stain filter (Wratten® #15 filter). Use of either of these filters will result in some loss of sensitivity.
Other Polaroid® or standard photographic systems using a glass Tiffen® filter	Tiffen® yellow no. 2 filter (Y-2)	None

Recommended Filters for CCD-based systems

Documentation System	Recommended Camera Filter	Other Suitable Camera Filters
Alpha Innotech Alphamager® 2000 system	Ethidium bromide bandpass filter from Alpha Innotech	None
Stratagene Eagle Eye® II system	Eagle Eye® SYBR® Green filter from Stratagene (#538DF75D509613)	None
Hitachi FMBIO® or FMBIO II system	505 Filter from Hitachi Software	None
Molecular Dynamics Fluorimager® SI system	515 Long pass filter from the standard filter set	None
Fuji Science Systems FLA-2000	Standard 510 nm cut-off filter provided with the system	None
Fuji Science Systems LAS-1000	Standard 510 nm cut-off filter provided with the system	None

To assist you with GelStar™ Stain use on other systems, the following are the emission and excitation maxima for GelStar™ Stain. There is a secondary excitation peak around 300 nm, which allows use of standard UV transillumination systems.

Excitation Wavelength	Emission Wavelength DNA (RNA)
493 nm	527 nm (532 nm)

GelStar™ Stain is manufactured for Lonza Rockland, Inc.

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

GelStar is a trademark of FMC Corporation. SYBR is a trademark of Molecular Probes, Inc. Wratten is a trademark of Eastman Kodak Co. Eagle Eye is a trademark of Stratagene, Inc. Alphamager is a trademark of Alpha Innotech Corp. Polaroid is a trademark of Polaroid Corp. Fluorimager is a trademark of Molecular Dynamics, Inc. FMRIO is a trademark of Hitachi Software Engineering America, Ltd. Tiffen is a trademark of Tiffen Manufacturing Corp. All other trademarks herein are marks of the Lonza Group or its affiliates. GelStar Stain is covered by U.S. Patent 5,436,134. Other U.S. and foreign patents pending.

© 2012 Lonza Rockland, Inc.
All rights reserved.