

# Product Information

## Go-Go™ Fast DNA Gel Running Buffer, 50X

**Catalog Number:** 41039-200ML, 41039-500ML, 41039-1L

**Unit Size:** 200 mL, 500 mL, or 1 L

### Storage and Handling

Store 50X concentrated buffer and diluted 1X buffer at room temperature. Product is stable for at least 12 months from date of receipt when stored as recommended.

### Color and Form

The 50X buffer is a transparent amber solution; after dilution to 1X in dH<sub>2</sub>O, the buffer should be clear and colorless.

### Product Description

Go-Go™ Fast DNA Gel Running Buffer is a novel, low ionic strength running buffer for fast electrophoresis of DNA agarose gels. Go-Go™ Fast buffer generates less heat during electrophoresis so you can run your gels up to three times faster than TAE or TBE gels, streamlining routine DNA gel analysis. Go-Go™ Fast buffer also gives crisper band resolution compared to conventional electrophoresis buffers. Go-Go™ Fast is supplied as a convenient 50X concentrated stock solution.

Go-Go™ Fast DNA Gel Running Buffer gives excellent results with GelRed® and GelGreen® DNA gel stains, as well as with GelRed® Prestain Plus 6X DNA Loading Dye. See Related Products. The buffer can be used with other commonly used gel stains like SYBR® Safe and ethidium bromide.

### Instructions for Use

1. Prepare 1X Go-Go™ Fast DNA Gel Running Buffer by diluting the 50X stock solution 1:50 in dH<sub>2</sub>O. For example, mix 20 mL of 50X Go-Go™ Fast buffer with 980 mL dH<sub>2</sub>O and mix well by shaking or stirring. The 1X buffer can be stored at room temperature.
2. Use the 1X buffer to cast your gel and run your gel. It is recommended to use the same batch of diluted buffer for gel casting and running, to avoid variation in buffer strength between the gel and the running buffer. It is not recommended to dilute the buffer below 1X, because this can lead to abnormal DNA migration.
3. Prepare your gel samples for electrophoresis as usual.
4. Run the gel. You can run 1X Go-Go™ Fast gels at voltages of 25-30 V/cm of gel length, or 2.5 to 3 times faster than is typical for 1X TBE or 1X TAE gels. Shorten the gel running time in proportion to the increase in voltage. For example, if you would normally run a 1X TBE gel at 100 V for 60-90 minutes, you can run a 1X Go-Go™ Fast gel at 250-300 V for 30 minutes.

### Notes:

- 1X Go-Go™ Fast gels are compatible with standard DNA gel extraction protocols.
- Ethidium bromide (EtBr) migrates in the opposite direction to DNA in precast gels; along with faster DNA separation, EtBr counter migration will also be faster in Go-Go™ Fast gels at high voltage. Adding EtBr to your running buffer may improve staining of smaller fragments. Alternatively, we recommend using GelRed® dye as an alternative to EtBr. In addition to being non-toxic and non-mutagenic, GelRed® does not migrate readily through the gel.
- Go-Go™ Fast buffer is not recommended for use with RNA gels or PAGE gels.

### Disposal

Go-Go™ Fast 50X buffer ingredients are not classified as environmentally hazardous. The buffer can be disposed of according to your institution's usual procedures for used electrophoresis buffers.

### Related Products

Cat. No.	Product
41028	Agarose LE, Ultrapure Molecular Biology Grade
41029	GelRed® Agarose LE
41030	GelGreen® Agarose LE
E90005	Gel-Bright™ Laser Diode Gel Illuminator
41011	GelRed® Prestain Plus 6X DNA Loading Dye
41003	GelRed® Nucleic Acid Gel Stain, 10,000X in Water
41005	GelGreen® Nucleic Acid Gel Stain, 10,000X in Water
99962-1	6X DNA Loading Buffer (Blue)
99958-1	6X DNA Loading Buffer (Orange)
31022	Ready-to-Use 1 kb DNA Ladder
31032	Ready-to-Use 100 bp DNA Ladder
31030	DNA Gel Extraction Kit
41024-4L	Water, Ultrapure Molecular Biology Grade (4L Cubitainer®)
41006	TBE Buffer, 5X
40042	Ethidium Bromide, 10 mg/mL in H <sub>2</sub> O
22007	Activated Charcoal Decontamination Bags
31041	Forget-Me-Not™ EvaGreen® qPCR Master Mix (2-Color Tracking)
31043	Forget-Me-Not™ Universal Probe qPCR Master Mix
31000	EvaGreen® Dye, 20X in Water
31077	EvaGreen® Plus Dye, 20X in Water
31028	AccuClear® Ultra High Sensitivity dsDNA Quantitation Kit
31066	AccuGreen™ High Sensitivity dsDNA Quantitation Kit for Qubit®
31069	AccuGreen™ Broad Range dsDNA Quantitation Kit for Qubit®
31060	AccuBlue® NextGen dsDNA Quantitation Kit
31073	AccuBlue® Broad Range RNA Quantitation Kit
41032	EMBER500™ RNA Prestain Loading Dye
CD502	CELLDATA DNASTORM™ FFPE DNA Extraction Kit
CD501	CELLDATA RNASTORM™ FFPE RNA Extraction Kit
CD503	CELLDATA DNASTORM™/RNASTORM™ Combination Kit

Please visit our website at [www.biotium.com](http://www.biotium.com) for information on our life science research products, including environmentally friendly EvaGreen® qPCR master mixes, fluorescent CF® Dye antibody conjugates and reactive dyes, apoptosis reagents, fluorescent probes, and kits for cell biology research.

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