

# MIDORI<sup>Green</sup> Direct

Cat. No. MG05, MG06 - MG07, MG08 (without loading dye)

## Description

MIDORI<sup>Green</sup> DIRECT represents a new and safe class of nucleic acid stains for visualization of double stranded DNA, single-stranded DNA, and RNA in agarose gels. The dyes were developed to replace the toxic Ethidium Bromide (EtBr is a potent mutagen), commonly used in gel electrophoresis for visualization of nucleic acids in agarose gels. MIDORI<sup>Green</sup> DIRECT was developed to work with Blue Light LED illuminators (like the FastGene<sup>®</sup> LED Illuminator or FastGene<sup>®</sup> LED Transilluminator) but it can be used with regular UV transilluminators as well.

The best signal is achieved using our unique excitation technology, the **BGLED** illuminators and imaging systems.

## Safety

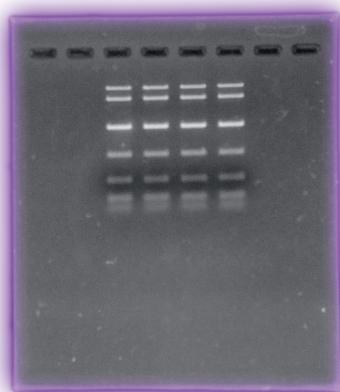
MIDORI<sup>Green</sup> DIRECT stain is non-carcinogenic and less mutagenic compared to Ethidium Bromide. Furthermore, we can state that MIDORI<sup>Green</sup> DIRECT is impenetrable to latex gloves and cell membranes. MIDORI<sup>Green</sup> DIRECT is also classified as non hazardous to aquatic life, under CCR Title 22 regulation. Thus, small amounts of MIDORI<sup>Green</sup> DIRECT stain can be safely released into the environment.

A detailed safety report can be downloaded at [www.nippongenetics.eu](http://www.nippongenetics.eu) or [www.nippongenetics.de](http://www.nippongenetics.de).

## Example of MIDORI<sup>Green</sup> DIRECT

**BGLED**  
BLUE GREEN\*

UV-light



## Quick Notes

- MIDORI<sup>Green</sup> DIRECT has loading buffer included
- Compatible with all illuminators
- No background signal

## Protocol

MIDORI<sup>Green</sup> DIRECT is provided in a sample loading buffer and should only be added to your samples.

1. Prepare the agarose solution
2. Mix gentle without having any air bubbles
3. Let the solution cool down to 60-70 °C
4. Cast the gel
5. Mix samples and DNA markers with MIDORI<sup>Green</sup> DIRECT stain at 1:10 (dye : samples) dilution rate.

**Remark:** If you expect only 1 or few DNA bands in a lane do not use more than 0.5 µl MIDORI<sup>Green</sup> DIRECT sample, even if you use more than 5 µl sample volume. If you apply DNA ladders or samples with many bands use 1 µl of Midori Green Direct.

6. After the electrophoresis, view and document your result, using traditional UV light or non-hazardous FastGene<sup>®</sup> Blue or Blue/Green LED Illuminator for health and performance reasons.

## Ordering Information

**MG05** - 50 µl MIDORI<sup>Green</sup> DIRECT with loading dye  
**MG06** - 1 ml MIDORI<sup>Green</sup> DIRECT with loading dye

**MG07** - 50 µl MIDORI<sup>Green</sup> DIRECT without loading dye  
**MG08** - 1 ml MIDORI<sup>Green</sup> DIRECT without loading dye