



## DyeNA-View™ Sample Stain in Loading Buffer (6X)

Catalogue Number: M7031 Size: 1mL

Catalogue Number: M7032 Size: 5mL

### Description

**DyeNA-View™ Sample Stain in Loading Buffer** is a non-mutagenic fluorescent reagent that produces instant visualization of DNA bands upon Blue Light or UV illumination of agarose gels, supplied premixed with our 6X DNA Loading Buffer. It is used to prepare DNA markers and samples for loading onto agarose or polyacrylamide gels. **DyeNA-View™ Sample Stain in Loading Buffer** is the most sensitive stain available for detecting double-stranded DNA (dsDNA). It is ideal for environments requiring a safe, non-hazardous alternative to ethidium bromide. Approximate fluorescence excitation maximas: 300-380, 495nm, and emission maxima 515nm (free) and 530nm (when bound to nucleic acid). Detection sensitivity is better than ethidium bromide by several fold for double-stranded DNA (5-10 fold), RNA (8-16 fold) and single-stranded DNA (4-8 fold). The dye does not inhibit commonly used enzymes, including *Taq* DNA polymerase, restriction enzymes, and T4 DNA ligase.

In addition to the Sample Stain, the **DyeNA-View™ Sample Stain in Loading Buffer (6X)** has the following components:

- 60mM Tris-HCl (pH 8.0)
- 0.06% Bromophenol Blue
- 0.03% Xylene Cyanol
- 36% Glycerol
- 60mM EDTA

### Storage

Store at 4 °C up to 12 months. For longer periods, store at -20 °C.

### Instruction for Use

1. Vortex **DyeNA-View™ Sample Stain in Loading Buffer** for 10 seconds prior to use.
2. Dilute 1 part **DyeNA-View™ Sample Stain in Loading Buffer**, with 5 parts DNA sample or DNA ladders. Mix by a 2-3 s vortexing step.

**Note:** *DyeNA-View™ Sample Stain in Loading Buffer must be added to DNA ladders in order to visualize the ladder bands simultaneously with the sample after electrophoresis.*

3. Load sample and ladders and run gel according to standard procedures.

**Note:** *The agarose or polyacrylamide gel does not need to be pre-stained at all when DyeNA-View™ Sample Stain In Loading Buffer is used as loading buffer and DNA stain to prepare both your DNA samples and DNA ladders. Similarly, there is no need to stain the gel, after electrophoresis is completed.*

4. After the electrophoresis, remove gel and place on a UV or a visible-light transilluminator to visualize bands.

**DyeNA-View™ Sample Stain in Loading Buffer** is light sensitive and should be stored protected from light.

**DyeNA-View™ Sample Stain in Loading Buffer** keeps your lab safe:

- Non-hazardous
- Minimize the leaching of stain into the running buffer.
- High Sensitivity
- Convenience-no need to add dye to the gel; just add this buffer to your sample before electrophoresis
- Time-saving
- Flexible: Can use Blue Light or UV to detect the signal
- Economical: – Non-hazardous product means no expenses required for waste management.
- Less DNA damage with Blue Light provides improved cloning efficiency\*

\*When using **DyeNA-View™ Sample Stain In Loading Buffer** with Blue Light Transilluminators

## Ordering Information for Gel Electrophoresis Products

Product	Cat. #	Size
<b>DyeNA-View™ Sample Stain In Loading Buffer (6X)</b>	M7031 M7032	1mL 5mL
<b>DyeNA-View™ Sample Stain</b>	M7021 M7022	1mL 5mL
<b>DyeNA-View™ Gel Stain</b>	M7011 M7012	1mL 5mL
<b>GB-Ruler™ 1 kb Ladder Plus</b>	M1181	50µg (100 Uses) 5 X 50µg (500 Uses)
<b>GB-Ruler™ 100 bp Ladder Plus</b>	M1071	50µg (100 Uses) 5 X 50µg (500 Uses)
<b>LE Agarose</b>	ELA-03	100 g 500 g
<b>GB-Clean™ Gel Extraction Kit</b>	N1071	50 Preps