

Nucleic Acid Stains

BioLit® SafeDye stain BSD001

Ethidium Bromide replacement

An exceptional **safe, non-carcinogenic and eco-friendly** nucleic acid stain used for the visualization of nucleic acids (double-stranded DNA, single-stranded DNA and RNA) on agarose gels which can be used as a replacement stain for Ethidium bromide (potential carcinogen/mutagen).

SafeDye is **as sensitive** as Ethidium Bromide, is used in the same way for electrophoresis and can be visualized similarly on a UV-transilluminator. It emits green fluorescence when bound to dsDNA, ssDNA and RNA and has a fluorescence excitation maxima at approx. 290-320nm, emitting at 515nm. Post-staining can also be done but is slightly less sensitive. To increase the sensitivity, the dye can also be added to the running buffer.

The dye contains no substances known to be hazardous to the environment or non-degradable in waste water treatment plants and can be disposed easily in accordance with local regulations.

Protocol...

- Prepare 20 ml of agarose solution of desired concentration
- Cool to about 40°C
- Add 2µl of SafeDye stain to 20 ml of agarose solution
- Mix gently by swirling and cast the gel
- Allow to polymerize and load samples. Electrophorese at appropriate voltage
- Place gel on a UV-transilluminator and visualize the nucleic acid bands

* Best results are achieved using 10µl SafeDye stain per 100ml agarose

Sensitivity profile

| | Wavelength emission (nm) | Sensitivity |
|--------|--------------------------|-------------|
| BSD001 | 290/490 | 0.2 – 0.6ng |
| EtBr | 290/605 | 0.2 – 0.5ng |

Prepare agarose gel **without** addition of regular Fluorescent dye



Add BioLit® SafeDye stain instead



Cast gel



Load samples and markers/ladders and electrophoresce



View your gel on a transilluminator



| Sr. No. | Product Code | Product Name | Pack size |
|---------|--------------|-----------------------|------------|
| 1 | BSD001 | BioLit® SafeDye stain | 250µl, 1ml |

Combo packs...

Varying range of (ready-to-load) DNA marker and ladder packs accompanied by a vial of BioLit® SafeDye Stain, for detection of the marker/ladder bands and your nucleic acid samples.

BioLit® SafeDye Marker Packs

| Sr. No. | Product Code | Product Name | Pack size |
|---------|--------------|------------------------------|-----------|
| 1 | BLM017 | SafeDye Hi-range DNA Marker | 50µg |
| 2 | BLM018 | SafeDye DNA Marker 1 | 50µg |
| 3 | BLM019 | SafeDye DNA Marker 4 | 50µg |
| 4 | BLM020 | SafeDye Mid-range DNA Marker | 50µg |

Packs of 50µg include 1×250µl of BioLit® SafeDye stain (BSD001)

BioLit® SafeDye Ladder Packs

| Sr. No. | Product Code | Product Name | Pack size |
|---------|--------------|---------------------------|--------------|
| 1 | BLL020 | SafeDye 50bp Ladder plus | 50µg, 5×50µg |
| 2 | BLL021 | SafeDye 100bp Ladder | 50µg, 5×50µg |
| 3 | BLL022 | SafeDye 100bp Ladder plus | 50µg, 5×50µg |
| 4 | BLL023 | SafeDye 500bp Ladder | 50µg |
| 5 | BLL024 | SafeDye 1kb Ladder plus | 50µg, 5×50µg |
| 6 | BLL025 | SafeDye PCR Ladder | 50µg, 5×50µg |

Packs of 50µg include 1×250µl of BioLit® SafeDye stain (BSD001) • Packs of 5×50µg include 1×1ml of BioLit® SafeDye stain (BSD001)

Nucleic Acid Stains

BioLit® FluroBronze stain BSD002

Ethidium Bromide replacement

Triple advantage

- Get your ladder/marker
- Get your FluroBronze stain included in the combo pack
- Eliminate addition of potentially harmful fluorescent dyes to your agarose gel

A unique **safe, non-carcinogenic and eco-friendly** nucleic acid stain provided as a 6× loading buffer that can be added to your nucleic acid samples prior to loading onto an agarose gel. The prominent feature of this stain is that it eliminates the addition of a fluorescent dye to your agarose gel thereby safe-guarding yourself from handling a carcinogenic fluorescent reagent like Ethidium Bromide.

Protocol...

- Prepare a 100ml agarose solution
- Mix gently. Solution should have no air bubbles
- Let the solution cool down to 60-70°C and cast the gel
- Mix nucleic acid samples/markers/ladders with BioLit® FluroBronze stain (2µl or 1:5 dilution)
- Run gel and view the results under UV light

| Sr. No. | Product Code | Product Name | Pack size |
|---------|--------------|---------------------------|------------|
| 1 | BSD002 | BioLit® FluroBronze stain | 250µl, 1ml |

Combo packs...

Varying range of (ready-to-load) DNA marker and ladder packs accompanied by a vial of BioLit® FluroBronze Stain, for detection of the marker/ladder bands and your nucleic acid samples.

BioLit® FluroBronze DNA Marker Packs

| Sr. No. | Product Code | Product Name | Pack size |
|---------|--------------|----------------------------------|--------------|
| 1 | BLM021 | FluroBronze Hi-range DNA Marker | 50µg |
| 2 | BLM022 | FluroBronze DNA Marker 1 | 50µg |
| 3 | BLM023 | FluroBronze DNA Marker 4 | 50µg |
| 4 | BLM024 | FluroBronze Mid-range DNA Marker | 50µg, 5×50µg |

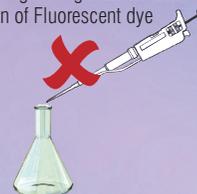
Packs of 50µg include 1×250µl of BioLit® FluroBronze stain (BSD002) • Packs of 5×50µg include 1×1ml of BioLit® FluroBronze stain (BSD002)

BioLit® FluroBronze DNA Ladder Packs

| Sr. No. | Product Code | Product Name | Pack size |
|---------|--------------|-------------------------------|--------------|
| 1 | BLL026 | FluroBronze 50bp Ladder plus | 50µg, 5×50µg |
| 2 | BLL027 | FluroBronze 100bp Ladder | 50µg, 5×50µg |
| 3 | BLL028 | FluroBronze 100bp Ladder plus | 50µg, 5×50µg |
| 4 | BLL029 | FluroBronze 500bp Ladder | 50µg |
| 5 | BLL030 | FluroBronze 1kb Ladder plus | 50µg, 5×50µg |
| 6 | BLL031 | FluroBronze PCR Ladder | 50µg, 5×50µg |

Packs of 50µg include 1×250µl of BioLit® FluroBronze stain (BSD002) • Packs of 5×50µg include 1×1ml of BioLit® FluroBronze stain (BSD002)

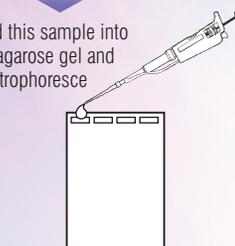
Prepare agarose gel **without** addition of Fluorescent dye



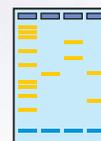
Add FluroBronze stain to your nucleic acid samples



Load this sample into the agarose gel and electrophoresis



View your gel on a transilluminator



Please contact: