ATR – SybrLoading Dye 6×
Catalog # ATR-LD01
Size: 1mL (6x)

1. Product Description

EtBr has been the predominant dye used for nucleic acid staining for decades because of its low price and generally sufficient sensitivity. However, EtBr is a highly mutagenic material. For this reason, various ethidium bromide alternative DNA stains have become commercially available in recent years. **ATR – SybrLoading Dye 6×** is one of the most sensitive stains available for detecting double-stranded DNA (dsDNA) in agarose and polyacrylamide gels. Because SYBR Green has greater sensitivity for dsDNA, it is especially useful for assays where the presence of contaminating RNA or ssDNA might obscure results.

2. Features and Benefits

- ✓ SYBR Green has more sensitivity than EtBr (at least four times greater)
- ✓ Compatible with UV transilluminators, gel documentation systems, and laser scanners
- ✓ The dye is noncytotoxic & nonmutagenic shown by Ames tests.

3. Spectral Characteristics

ATR – SybrLoading Dye 6× is maximally excited at 497 nm, but also has secondary excitation peaks at ~290 nm and ~380 nm (Figure 1). The fluorescence emission of SYBR® Green I stain bound to DNA is centered at 520 nm. These spectral characteristics make ATR – SybrLoading Dye 6× compatible with a wide variety of gel reading instruments, ranging from those with ultraviolet epi- and transillumination to argon laser and mercury-arc lamp excitation gel scanners.

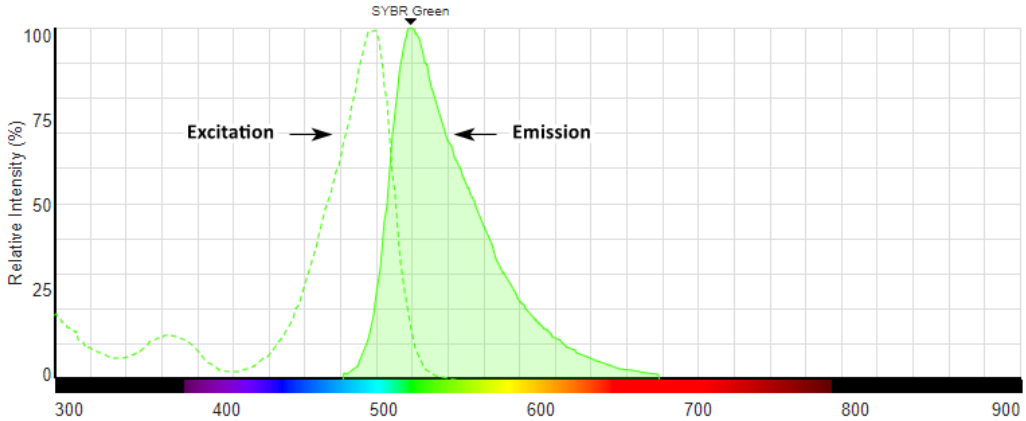

Figure 1. Spectral Characteristics

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4. Shipping and Storage

This product is shipped on blue ice. Store the product at –20°C. When stored under the recommended conditions and handled correctly, these products should be stable for at least 1 year from date of receipt.

***Additional Storage Conditions**: store dark

5. Protocol

Add the ATR – SybrLoading Dye 6× according to the following Table 1 to your PCR product before loading into the gel.

Table 1.

Volume Of PCR Product	Amount of – SybrLoading Dye
5 µL	0.83 µL
10 µL	1.6 µL
15 µL	2.5 µL
20 µL	3.3 µL

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