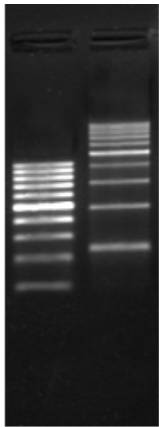




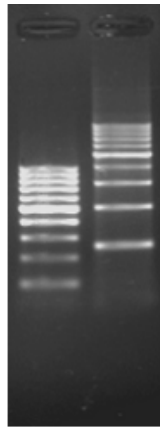
Blue Gel Loading Buffer with DNA Stain

Loading buffer for agarose or polyacrylamide gels with SYBR® Green fluorescent DNA stain

| Cat. No. | Amount |
|----------|------------|
| PCR-274 | 5 x 1,8 ml |



Gel Loading Buffer with SYBR® Green DNA Stain



Commonly stained gel with Ethidium Bromide

For in vitro use only!

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: store dark

Shelf Life: 12 months

Form: Liquid

Concentration: 6x conc.

Applications:

Blue Gel Loading buffer with DNA Stain is recommended for analyzing DNA fragments ≥ 500 bp.

Add one part of Gel Loading Buffer to 5 parts of the DNA sample as shown in the table below. Spin down the tubes and vortex gently to achieve homogeneity.

| DNA sample | 5 μ l | 10 μ l | 20 μ l | 50 μ l |
|-----------------------|-----------|------------|------------|------------|
| 6x Gel Loading Buffer | 1 μ l | 2 μ l | 4 μ l | 10 μ l |

Description:

Jena Bioscience Gel Loading Buffers with DNA Stain are formulated to facilitate loading of DNA samples into the wells of agarose and polyacrylamide gels. The loading buffers contain SYBR® Green DNA Stain a fluorescent DNA intercalator dye specially developed for DNA analysis applications. High quantum yield and excellent stability makes SYBR® Green the ideal fluorophore for DNA staining applications and a superior replacement for the widely used dyes Ethidium Bromide.

The buffers contain tracking dyes as indicator for DNA fragment migration. In addition, they contain glycerol to add density and EDTA to inhibit nuclease activities.

The buffers are optimized for loading of DNA fragments in a size range of:

| Gel Loading Buffer | Cat. No. | fragment size |
|---------------------------|----------|---------------------|
| Blue Gel Loading Buffer | PCR-274 | larger than 500 bp |
| Green Gel Loading Buffer | PCR-275 | from 100 to 2000 bp |
| Orange Gel Loading Buffer | PCR-276 | smaller than 500 bp |

6x Gel Loading Buffer:

60 mM Tris-HCl (pH 7.5), 60 mM EDTA, 50 % (w/v) Glycerol, bromophenol blue, xylene cyanol FF, SYBR® Green

Performance:

The Gel Loading Buffer provides highest convenience during routine handling and avoids commonly used gel staining procedures with Ethidium Bromide.

Fragment Separation on Agarose Gels:



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| DNA fragment size | recommended agarose gel conc. | ethylene cyanol FF running at approx. | bromo-phenol blue running at approx. | orange G running at approx. |
|-------------------|-------------------------------|---------------------------------------|--------------------------------------|-----------------------------|
| 20-400 bp | 3.6 % | 280 bp | 40 bp | 2 bp |
| 50-1000 bp | 3.0 % | 500 bp | 60 bp | 2 bp |
| 100-2000 bp | 2.4 % | 900 bp | 100 bp | 3 bp |
| 200-4000 bp | 1.8 % | 1800 bp | 40 bp | 5 bp |
| 0.5-10 kb | 1.2 % | 4.5 kb | 0.5 kb | 10 bp |
| 1-30 kb | 0.6 % | 12 kb | 1.2 kb | 100 bp |