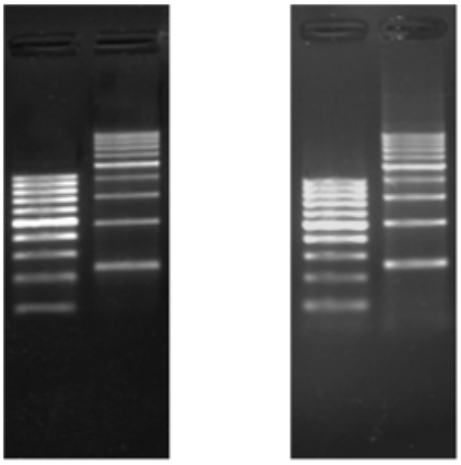
DATA SHEET

Jena Bioscience

Orange Gel Loading Buffer with DNA Stain

Loading buffer for agarose or polyacrylamide gels with green-fluorescent DNA stain

Cat. No.	Amount
PCR-276	5 x 1,8 ml



Gel Loading Buffer with DNA Stain (l.) vs.
gel stained with Ethidium Bromide (r.)

For general laboratory use.

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:
Orange 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 µl	10 µl	20 µl	50 µl
6x Gel Loading Buffer	1 µl	2 µl	4 µl	10 µl

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 buffer contains a green-fluorescent DNA stain specially developed for DNA analysis applications. The high quantum yield and excellent stability make the dye the ideal fluorophore for DNA staining applications and an excellent replacement for the widely used dye 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, orange G, green-fluorescent DNA stain

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.	xylene cyanol FF running at approx.	bromophenol 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