

# DNA Loading Buffer

| Batch No.: | Product                     | Catalog number     |
|------------|-----------------------------|--------------------|
| See vial   | 5x Loading Buffer Blue      | BIO-37045: 2 x 1ml |
|            | 5x Loading Buffer Red       | BIO-37068: 2 x 1ml |
|            | 5x Loading Buffer Tri-Color | BIO-37070: 2 x 1ml |



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## Storage and Stability:

The DNA Loading Buffer is shipped at ambient temperature and stored at -20°C.

## Expiry

When stored under the recommended conditions and handled correctly, full activity of the kit is retained until the expiry date on the outer box label.

## Safety precautions:

This product is for R&D use only, not for human use, or any other use. Please refer to the material safety data sheet for information regarding hazards and safe handling practice.

## Quality control specifications:

DNA Loading Buffer is extensively tested for batch-to-batch reproducibility prior to release.

## Trademarks

MyTaq and HyperLadder are trademarks of Bioline Reagents Limited.

## Notes

Research Use Only.

## Features:

- Colored loading for easy recognition
- No need to add dye
- Guarantee reproducible results

## Applications:

- To monitor migration rate during agarose electrophoresis
- Loading of samples onto DNA agarose gels

## Description

The Colored DNA Loading Buffers are ready-to-use solutions premixed with bromophenol blue (Blue), cresol red (Red), orange G and xylene cyanol FF (TriColor). The dyes in the Colored DNA Loading Buffers migrate at different rates depending on the dye and the concentration of the agarose gel (see Dye Migration Table below). This allow users to monitor DNA migration, and therefore increase the versatility of their DNA analysis, by choosing the buffer most suited to their application.

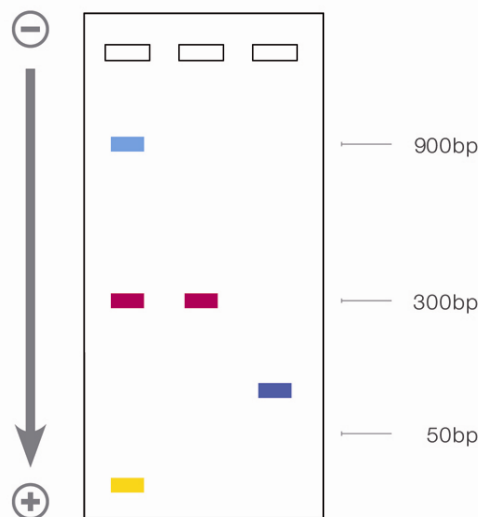
## Recommended protocol

- Add 1 volume of loading buffer to 4 volumes of sample
- Mix well by pipeting
- Load carefully on agarose gel and run as normal

## Dye mobility table:

The following table gives the approximate migration rates of dyes in different agarose concentrations in TAE buffer. The values indicate the size of DNA fragments with which the dye will co-migrate at that particular gel concentration.

| Agarose gel Concentration | Xylene Cyanol FF | Bromophenol Blue | Cresol Red | Orange G |
|---------------------------|------------------|------------------|------------|----------|
| 0.7%                      | 8000             | 600              | 3000       | 100      |
| 1.0%                      | 4000             | 400              | 1500       | 50       |
| 1.5%                      | 2000             | 250              | 900        | 20       |
| 2.0%                      | 900              | 120              | 300        | <10      |
| 3.0%                      | 400              | 50               | >100       | <10      |



**Graphic representation of DNA Loading Buffers on a 2% agarose gel (bands are approximate).**

Lane 1. 5x DNA Loading Buffer Tri-Color

Lane 2. 5x DNA Loading Buffer Red

Lane 3. 5x DNA Loading Buffer Blue

## Associated products:

| Product Name             | Pack Size | Catalog No. |
|--------------------------|-----------|-------------|
| Agarose, Molecular Grade | 500g      | BIO-41025   |
| Agarose Tablets          | 500g      | BIO-41027   |
| MyTaq™ DNA Polymerase    | 500 Units | BIO-21105   |
| HyperLadder™ 1kb         | 100 Lanes | BIO-33053   |

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