

# ImmoMix™ & ImmoMix™ Red

Shipping: Dry/Blue Ice Catalog numbers

Batch No.: See vial ImmoMix: 500 x 50µL Rxn 10 x 1.25 mL BIO-25020  
ImmoMix Red: 500 x 50 µL Rxn 10 x 1.25 mL BIO-25022

Store at -20 °C



## Storage and stability:

The ImmoMix is shipped on dry/blue ice. On arrival store at -20 °C for optimum stability. Repeated freeze/thaw cycles should be avoided. Thaw, mix, and briefly centrifuge each component before use.

## 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:

Please refer to the material safety data sheet for further information.

## Quality control specifications:

ImmoMix and its components are extensively tested for activity, processivity, efficiency, heat activation, sensitivity, absence of nuclease contamination and absence of nucleic acid contamination prior to release.

## Notes:

For research or further manufacturing use only.

## Trademarks:

IMMOLASE and HyperLadder are Trademarks of Bioline.

## Features

- Same high specificity and performance as IMMOLASE DNA Polymerase
- Reduced risk of contamination
- Dramatically decreases the time required for reaction set-up

## Applications

- Hot-start PCR assays
- TA cloning

## Description

ImmoMix is a complete ready-to-use heat-activated 2x reaction-mix, which simply requires the user to add only water, template and primers, and then pre-heat to 95 °C for 10 minutes to successfully carry out PCR assays. The 10-minute activation step eliminates the presence of non-specifics such as primer-dimers and mis-primed products, since the enzyme is inactive at initial low temperatures.

ImmoMix Red combines all of the features and advantages of ImmoMix, and contains an additional inert red dye. This non-toxic, non-hazardous red dye allows users to load samples directly onto a gel, without the need to add loading buffer since the mix is of sufficiently high density to sink to the bottom of the gel.

ImmoMix and ImmoMix Red dramatically reduce the time needed to set up reactions, thereby reducing the risk of contamination. Greater reproducibility is ensured, by reducing the number of pipetting steps that can lead to pipetting errors.

## Components

ImmoMix	500 Reactions
ImmoMix	10 x 1.25 mL
50 mM MgCl <sub>2</sub> Solution	1.2 mL
ImmoMix Red	
ImmoMix Red	10 x 1.25 mL
50 mM MgCl <sub>2</sub> Solution	1.2 mL

For optimal resolution of PCR products, we recommend the use of Tris-Acetate EDTA (TAE) buffer for gel preparation and electrophoresis.

When used in a 50 µL reaction volume, ImmoMix contains 3 mM MgCl<sub>2</sub>. An additional tube of 50 mM MgCl<sub>2</sub> is provided should any fine adjustments be necessary. The table below shows the volume of MgCl<sub>2</sub> that must be added to a 50 µL final reaction to achieve the desired final concentration.

Final MgCl <sub>2</sub> Required	MgCl <sub>2</sub> to be added
3.0 mM	0 µL
3.5 mM	0.5 µL
4.0 mM	1 µL

### Reaction conditions (50µL reaction)

ImmoMix / ImmoMix Red	25 µL
Template and Primers	as required
Water (ddH <sub>2</sub> O)	up to 50 µL

Activation: pre-heating step at 95 °C for 10 minutes  
Denaturation: 94-96 °C  
Annealing: depends on primer T<sub>m</sub>  
Extension: 72 °C (allowing 15-30 seconds/kb)

**This data is intended for use as a guide only; conditions will vary from reaction to reaction and may need optimization.**

## General Considerations:

The enzyme must be activated by heat treatment before PCR cycling. All reaction components (including IMMOLASE) should be added to the reaction, and then **pre-incubated at 95°C for 10 minutes**.

If the PCR extension time exceeds 2.5 minutes, program the thermal cycler to run for a maximum of 30 cycles. Increasing the number of cycles may lead to smearing of bands when the samples are run on an agarose gel.

Product	Pack size	Cat. No.
Agarose	100 g	BIO-41026
Agarose Tablets	150 g	BIO-41028
HyperLadder™ 1kb	200 Lanes	BIO-33025
SureClean Plus	1 x 5 mL	BIO-37047

## Associated Products

### Product Citations

#### ImmoMix

1. Milne, D. & Powell, S.M. *Food Control* **42**: 29-33 (2014).
2. Chen, Y. & Hu, X. *J. Virol. Meth.* **193(1)**: 177-183 (2013).
3. Stordal, B. & Davey, R. *Can. Chemo. Pharmacol.* **63(4)**, 661-72 (2009).
4. Schwartz, T. S., *et al. Proc. Biol. Sci.* **275(1637)**, 979-985 (2008).

#### ImmoMix Red

1. Lu, N., *et al. Plant Cell Rept.* 1-14 (2014).
2. Ni, A., *et al. Stem Cell Dev.* **22(18)**: 2543-2550 (2013).
3. Arnold, H. K., *et al. EMBO J.* **28**: 1-13 (2009).
4. Guo, B., *et al. Mol. Cell. Biol.* **26(12)**: 4529-4538 (2006).

Bioline Reagents Ltd  
UNITED KINGDOM

Tel: +44 (0)20 8830 5300  
Fax: +44 (0)20 8452 2822

Meridian Life Science Inc.  
USA

Tel: +1 901 382 8716  
Fax: +1 901 382 0027

Bioline GmbH  
GERMANY

Tel: +49 (0)3371 60222 00  
Fax: +49(0)3371 60222 01

Bioline (Aust) Pty. Ltd  
AUSTRALIA

Tel: +61 (0)2 9209 4180  
Fax: +61 (0)2 9209 4763