

ImmoMix™ & ImmoMix™ Red

Shipping: Room Temperature
Catalog numbers

Batch No.: See vial
ImmoMix: 100 x 50µl Rxn 2 x 1.25ml BIO-25019
ImmoMix: 500 x 50µl Rxn 10 x 1.25ml BIO-25020
ImmoMix Red: 100 x 50µl Rxn 2 x 1.25ml BIO-25021
ImmoMix Red: 500 x 50µl Rxn 10 x 1.25ml BIO-25022

Store at -20°C



Storage and stability:

ImmoMix and ImmoMix Red are shipped on Dry/Blue Ice. All kit components should be stored at -20°C upon receipt. Excessive freeze/thawing is not recommended. When stored under optimum conditions, the reagents are stable for a up to 12 months at -20°C, or up to 2 weeks at +4°C.

Reagent Specifications:

MgCl₂ Stock Solution: 50mM MgCl₂

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	100 Reactions	500 Reactions
ImmoMix	2 x 1.25ml	10 x 1.25 ml
50mM MgCl ₂ Solution	1.2ml	1.2ml
ImmoMix Red		
ImmoMix Red	2 x 1.25ml	10 x 1.25ml
50mM MgCl ₂ Solution	1.2ml	1.2ml

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 50µl reaction volume, ImmoMix contains 3mM MgCl₂. An additional tube of 50mM MgCl₂ is provided should any fine adjustments be necessary. The table below shows the volume of MgCl₂ that must be added to a 50µl final reaction to achieve the desired final concentration.

Final MgCl ₂ Required	MgCl ₂ to be added
3.0mM	0µl
3.5mM	0.5µl
4.0mM	1µl

Reaction conditions (50µl reaction)

ImmoMix / ImmoMix Red	25µl
Template and Primers	as required
Water (ddH ₂ O)	up to 50µl

Activation: pre-heating step at 95°C for 10 minutes
Denaturation: 94-96°C
Annealing: depends on primer T_m
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.

Associated Products

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

Product Citations

ImmoMix

1. Stordal, B. & Davey, R. *Can. Chemo. Pharmacol.* **63(4)**, 661-72 (2009).
2. Schwartz, T. S., *et al. Proc. Biol. Sci.* **275(1637)**, 979-985 (2008).
3. Walter, I. & Seebacher, F. *Am J Physiol.* **293**, 2315-2322 (2007).
4. Fakhari, F.D., *et al. J. Clin. Investigation* **116(3)**, 735-742 (2006).

ImmoMix Red

1. Arnold, H. K., *et al. EMBO J.* **28** 1-13 (2009).
2. Churchill, M. J., *et al. Annals of Neurol.* **66(2)**, 253 - 258 (2009).
3. Guo, B., *et al. Mol. Cell. Biol.* **26(12)**, 4529-4538 (2006).
4. Shintaku, M., *J. Hawaiian Pacific Agric.* **13**, 9-14 (2006).



DATA SHEET