BioMix Red

Shipping: On Dry/Blue Ice

Exp. Date: See vial

Batch No.: See vial

Concentration: 2x

Catalog numbers

BIO-25005 : 100 x 50µl reactions: 2 x 1.25ml

BIO-25006 : 500 x 50µl reactions: 10 x 1.25ml

Store at –20°C

Storage and stability:
The BioMix Red is shipped on Dry/Blue Ice and can be stored for up to 6 months at -20°C, or up to 2 weeks at +4°C. Repeated freeze/thaw cycles should be avoided.

Safety precautions:
Harmful if swallowed. Irritating to eyes, respiratory system and skin. Please refer to the material safety data sheet for further information.

Notes:
This product insert is a declaration of analysis at the time of manufacture.
Research Use Only.

Features

- Convenient pre-mixed, pre-optimized 2x solution
- Premium Taq polymerase suited to a wide range of applications
- Processes fragments up to 5Kb
- Reduced risk of contamination
- Dramatically decreases the time required for reaction set-up
- Reproducible results
- Direct gel loading

Applications

- Routine PCR applications
- Products suitable for TA cloning
- High throughput

Description

BioMix Red is a complete ready-to-use 2x reaction mix containing an ultra-stable *Taq* DNA polymerase. It contains an additional inert red dye that permits easy visualization and direct loading onto a gel. There is no need to add loading buffer as the mix is of sufficiently high density to sink to the bottom of the gel.

BioMix Red has been developed to perform PCR assays of many common genomic and cDNA templates; the user has simply to add water, template and primers. It dramatically reduces the time required to set up reactions, thereby minimizing the risk of contamination. Greater reproducibility is ensured, by reducing the number of pipetting steps that can lead to errors.

BioMix Red has been optimized for a wide variety of templates, however an additional 50mM of $MgCl_2$ solution is included should any fine adjustments be required.

Components

	100 Reactions	500 Reactions
BioMix Red	2 x 1.25ml	10 x 1.25ml
50mM $MgCl_2$ Solution	1.2ml	1.2ml

Product Citations:

1. Schultz, J.K., *et al. J. Hered.* **100(1)**, 25-33 (2009).
2. Walker, A.G., *et al. J. Neurosci.* **28(36)**, 8973– 8982 (2008).
3. Kane, N., *et al. Endo. J.* **150(6)**, 2882-2888 (2008).
4. Rayner, B.S., *et al. J. Neurochem.* **97(1)**, 211 (2006).
5. Song, C.J., *et al. J. Thrombo. Haemost.* **4(1)**, 98 (2006).
6. Martinez-Cuesta, M.C., *et al. Lett. Appl. Microbiol.* **40(1)**, 44 (2005).

BioMix Red Protocol

Reaction Conditions (For a 50µl reaction)

The optimal conditions will vary from reaction to reaction and are dependent on the system used. Each parameter has to be adjusted individually and some optimization may be required.

BioMix Red	25µl
Template and Primers	as required
Water (ddH_2O)	up to 50µl

Denature: 94-96°C
Extension: 70-72°C Allowing 15-30 seconds per Kb

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

An additional tube of 50mM $MgCl_2$ is provided should any fine adjustments be necessary. The table below shows the volume of $MgCl_2$ to add to a 50µl reaction to achieve different final concentrations.

Final Magnesium concentration required	Volume of 50mM $MgCl_2$ to add to a 50µl final reaction volume
2.0mM	0
2.5mM	0.5µl
3.0mM	1µl

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

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium