

# MangoMix™

Shipping: On Dry/Blue Ice Catalog numbers

BIO-25033: 250 x 50µl reactions: 5 x 1.25 mL

Batch No.: See vial

BIO-25034: 1000 x 50µl reactions: 20 x 1.25 mL

Concentration: 2x

Store at -20°C



## Storage and stability:

The MangoMix 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:

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

## Notes:

For research or further manufacturing use only.

## Trademarks:

MangoMix, MangoTaq and HyperLadder are Trademarks of Bioline.

## Features

- High throughput and cost-effective solution
- Direct gel loading
- Easy visual recognition
- Convenient pre-mixed, pre-optimized 2x solutions
- Reduced risk of contamination
- Dramatically decreases the time required for reaction set-up

## Applications

- For high throughput applications
- Suitable for a wide range of PCR assays
- Products suitable for blunt ended cloning

## Description

MangoMix is a complete ready-to-use 2x pre-optimized reaction mix containing MangoTaq™ DNA Polymerase, dNTPs, red and orange reference dyes and Mg<sup>2+</sup>. MangoMix enables users to perform PCR assays of most common genomic and cDNA templates, simply requiring the addition of water, template and primers to perform the assays. MangoMix dramatically reduces the time required to set up reactions, thereby minimizing the risk of contamination.

The red and orange dyes facilitate easy recognition and separate during electrophoresis to provide quick reference points for monitoring the mobility of the DNA samples in the gel. There is no need for separate gel-loading buffer. The presence of the dyes has no effect on routine enzymatic manipulations, although rare exceptions may exist.

## Components

	250 Reactions	1000 Reactions
MangoMix	5 x 1.25 mL	20 x 1.25 mL
50 mM MgCl <sub>2</sub> Solution	1.2 mL	1.2 mL

## Product Citations:

1. Tortorelli, G., *et al. Frontiers in Marine Sci.* Jan 22 (2020)
2. Hedtke, B. and Grimm, B. *NAR.* **37(11)**, 3739–3746 (2009)
3. Lau, A., *et al. J. Clin. Microbiol.* **46(9)**, 3021-3027 (2008)
4. Madadi, G., *et al. Biochem. Biophys. Res. Com.* **376(4)**, 694-699 (2008)
5. Ware, S.B., *et al. Fungal Gen. Biol.* **44(5)**, 389-397 (2007)
6. Ho, S.W., *et al. PNAS* **103(26)**, 9940-9945 (2006)

## Associated Products:

Product Name	Pack Size	Cat No
MangoTaq™ DNA Polymerase	1000 Units	BIO-21083
HyperLadder™ 1kb	200 Lanes	BIO-33025
Agarose	100g	BIO-41026
SureClean Plus	1 x 5ml	BIO-37047

## MangoMix Protocol

### Reaction Conditions (For a 50 µL reaction)

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

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.

MangoMix is supplied with 5 mM MgCl<sub>2</sub>, giving a final reaction concentration of 2.5 mM, which in the presence of the reaction additives and stabilizers provides excellent performance and specificity.

MangoMix has been optimized for a wide variety of templates; however an additional 50 mM of MgCl<sub>2</sub> solution is included in case any fine adjustments are required.

Final Magnesium concentration required	Volume of 50 mM MgCl <sub>2</sub> to add to a 50 µL final reaction volume
2.5 mM	0
3.0 mM	0.5 µL
3.5 mM	1 µL

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

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)33 7168 1229  
Fax: +49 (0)33 7168 1244

Bioline (Aust) Pty. Ltd  
AUSTRALIA

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