# MangoMix™

Shipping: On Dry/Blue Ice Catalog numbers

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

Batch No.: See vial BIO-25034 :  $1000 \times 50 \mu l$  reactions:  $20 \times 1.25 ml$ 

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.

## 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:

Bioline operates under ISO 9001 Management System. 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:

Research use only.

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 Mango*Taq*™ 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 1.25ml	20 x 1.25ml
50mM MgCl <sub>2</sub> Solution	1.2ml	1.2ml

# **Product Citations:**

- 1. Hedtke, B. and Grimm, B. NAR. 37(11), 3739–3746 (2009)
- 2. Lau, A., et al. J. Clin. Microbiol. 46(9), 3021-3027 (2008)
- 3. Madadi, G., et al. Biochem. Biophys. Res. Com. 376(4), 694-699 (2008)
- 4. Lee, R. M., et al. Weed Sci. 56(3), 371-375 (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
Mango <i>Taq</i> ™ DNA Polymerase	1000 Units	BIO-21083
HyperLadder™ 1kb	200 Lanes	BIO-33025
Agarose	100g	BIO-41026
SureClean Plus	1 x 5ml	BIO-37047

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# MangoMix Protocol

# Reaction Conditions (For a 50µl reaction)

MangoMix	25µl
Template and Primers	as required
Water (ddH₂O)	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.

MangoMix is supplied with 5mM MgCl<sub>2</sub>, giving a final reaction concentration of 2.5mM, 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  $\text{MgCl}_2$  solution is included in case any fine adjustments are required.

Final Magnesium concentration required	Volume of 50mM MgCl₂ to add to a 50µl final reaction volume
2.5mM	0
3.0mM	0.5µl
3.5mM	1μΙ

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

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