

MangoTaq™

Shipping: On Dry/Blue Ice Catalog numbers

BIO-21083 : 1000 Units

Batch No.: See vial

BIO-21082 : 2000 Units

Concentration: 2x

BIO-21078 : 5000 Units

Store at -20°C



A Meridian Life Science® Company

Storage and stability:

MangoTaq 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.

Unit definition:

One unit is defined as the amount of enzyme that incorporates 10nmols of dNTPs into acid-insoluble form in 30 minutes at 72°C.

Quality control specifications:

Bioline operates under ISO 9001 Management System. MangoTaq 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.

MangoTaq and MangoMix are Trademarks of Bioline Reagents Ltd.

Features

- Excellent price and performance
- Easy visual recognition
- Direct loading onto agarose gels
- Robust performance
- Available as a ready-to-use 2x Reaction mix (MangoMix™)

Applications

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

Description

MangoTaq™ DNA Polymerase is a formulation of Taq DNA Polymerase which offers high yield across a wide range of DNA templates. MangoTaq DNA Polymerase possesses 5'-3' exonuclease activity and leaves an 'A' overhang such that the PCR product is suitable for effective integration into TA cloning vectors. The polymerase is supplied with two different reaction buffers for greater user flexibility. For high-throughput applications, MangoTaq and the colored reaction buffer make an ideal choice, since this combination enables the user to load directly on a gel in order to facilitate easy recognition.

The two reaction buffers supplied are: 5x Colored Reaction Buffer and 5x Colorless Reaction Buffer. The colored reaction buffer contains red and orange dyes, which separate during electrophoresis and provide quick reference points for monitoring the mobility of the DNA samples in the gel. The colored reaction buffer can be loaded directly onto an agarose gel for analysis, without the need for separate gel-loading buffer. The presence of the dyes has no effect on routine enzymatic manipulations, although rare exceptions may exist.

Since the colorless reaction buffer does not contain reference dyes, it is suitable for use when reaction products will be used directly for down-stream processes involving absorbance or fluorescent detection.

Components:

	1000 Reactions	2000 Reactions	5000 Reactions
MangoTaq	200µl	2 x 200µl	5 x 200µl
5x MangoTaq Colored Reaction Buffer	4 x 1.5ml	8 x 1.5ml	20 x 1.5ml
5x MangoTaq Colorless Reaction Buffer	4 x 1.5ml	8 x 1.5ml	20 x 1.5ml
50mM MgCl ₂ Solution	2 x 1.2ml	4 x 1.2ml	10 x 1.2ml

Citations:

1. Russell, A.B. *et al. Nature* **475**, 343-347 (2011).
2. Cheng, K. *et al. J. Neurosci.* **31**, 11905-11913 (2011).
3. Dhillon, S.S. *et al. Endocrin.* **152**, 4138-4147 (2011).
4. Augustus, A.M. & Spicer, L.D. *BMC Genomics* **12**, 558 (2011).
5. Lau, A., *et al. J. Clin. Microbiol.* **48(3)**, 811-816 (2010).
6. Hedtke, B. & Grimm, B. *NAR* **37(11)**, 3739-3746 (2009).
7. Fukui, H. & Moraes, C.T. *Hum. Mol. Genet.* **18**, 1028-1036 (2009).
8. Telle, S. & Thines, M. *PLoS One* **3(10)** e3584 (2008).
9. Lau, A., *et al. J. Clin. Microbiol.* **46(9)**, 3021-3027 (2008).
10. Ho, S-W., *et al. PNAS* **103 (26)**, 9940-9945 (2006).

Associated Products:

Product Name	Pack Size	Cat No
MangoMix™	250 reactions	BIO-25033
dNTP Mix 100mM total	1 x 500µl	BIO-39028

PCR Reaction conditions (for a 50µl reaction)

5x MangoTaq Reaction Buffer (Colored or colorless)	10µl
50mM MgCl ₂ Solution	1.5-4.0µl
100mM dNTP Mix (see below)	0.5-1.0µl
Template and Primers	as required
Enzyme	0.5-1.0µl
Water (ddH ₂ O)	up to 50µl

Bioline 100mM dNTP Mix is available as a separate product (Cat. No. BIO-39028)

Denature: 94-96°C

Extension: 70-72°C Allowing 15-30 seconds per kb

Final Magnesium concentration required	Vol. of 50mM MgCl ₂ to add to a 50µl final reaction volume
1.5mM	1.5µl
2.0mM	2.0µl
4.0mM	4.0µl

Stock Solution: 50mM MgCl₂ (suggested final concentration 1.5mM - 4mM).

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

Bioline USA Inc.
USA

Tel: +1 508 880 8990
Fax: +1 508 880 8993

Bioline GmbH
GERMANY

Tel: +49 (0)337 168 1229
Fax: +49 (0)3371 68 1244

Bioline (Aust) Pty. Ltd
AUSTRALIA

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

Bioline France
FRANCE

Tel: +33 (0)1 42 56 04 40
Fax: +33 (0)9 70 06 62 10

Meridian Bioscience Asia Pte Ltd
SINGAPORE

Tel: +65 6774 7196
Fax: +65 6774 6441