



Product Insert
BioMix / BioMix Red

Research Use Only

Product:

BioMix / BioMix Red

Product Name	No. of Reactions	Catalogue No.
BioMix	100	BIO-25011
BioMix	500	BIO-25012
BioMix Red	100	BIO-25005
BioMix Red	500	BIO-25006

Composition of Supplied 2x Mix:

BIOTAQ DNA Polymerase
2mM dNTPs
32mM (NH₄)₂SO₄
125mM Tris-HCL (pH 8.8 at 25°C)
0.02% Tween 20
3mM MgCl₂
Stabiliser
Inert Dye (BioMix Red Only)

Batch details:

Batch No: See vial
Cat No: See vial

Additional reagents supplied:

MgCl₂ Stock Solution: 50mM MgCl₂

Description:

An optimised polymerase/dNTP mix in a ready-to-go format

BioMix is a complete ready-to-go 2x reaction mix containing BIOTAQ DNA Polymerase, to which the user adds only water, template and primers to successfully carry out Polymerase assays of many common genomic and cDNA templates. BioMix also contains MgCl₂ (1.5 mM) and ultra-pure dNTPs manufactured by Bioline, delivering outstanding performance. BioMix has been optimised for a wide variety of templates; however a 50mM magnesium solution is included in case any fine adjustments are required.

BioMix dramatically reduces the time required 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 errors.

BioMix Red combines all of the features and advantages described above, but also contains a red-dye that permits easy visualisation and direct loading onto a gel (no need to mix with loading buffer).

Directions for Use:

BioMix is designed with ease of use in mind. Each reaction requires 25µl of the supplied 2x BioMix, addition of Primers and Template, and finally 18.2mΩ water to make the reaction mix up to 50µl.

2x BioMix is supplied with 3mM MgCl₂, giving a final reaction concentration of 1.5mM, which in the presence of the reaction additives and stabilisers gives excellent performance and specificity.

Reaction Conditions (for a 50µl volume)

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

Denature: 94-96°C
Elongate: 70-72°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 optimisation.

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 volume to achieve the desired final concentration.

Final MgCl ₂ Required	MgCl ₂ to be added
1.5mM	0µl
2.0mM	0.5µl
2.5mM	1µl

Storage Conditions:

6 months at -20°C or 2 weeks at 4°C

Extended Stability: This product was stored at +20 °C over a 5 week period and tested daily. No detectable loss of activity was evidenced. However, due to potential of microbiological contamination, please adhere to storage conditions outlined above.

Repeated freeze/thaw should be avoided

Shipping: Product is shipped at -20°C. However, due to stability features mentioned above, trial samples are shipped at room temperature and can be used within the following 3-4 weeks.

Note: This product is supplied for use in primer extension reactions. Purchase of this product does not convey a licence to perform any patented process.

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This product contains a declaration of analysis at the time of manufacture