

LyoGreen™ Master Mix

Biomeme LyoGreen™ Master Mix (Product code 300007) is a lyophilized master mix containing core reaction components for real-time polymerase chain reaction (PCR) analysis using double-stranded DNA (dsDNA) binding dye. The master mix contains BRYT-Green™ Dye from Promega.

A proprietary blend of stabilizers and macromolecules, **Biomeme LyoGreen™ Master Mix** includes reaction buffer, magnesium ions, dNTP nucleotides and Taq DNA polymerase. For a complete PCR reaction mix, the Master Mix is added to oligonucleotide primers specific to the DNA target.

Biomeme LyoGreen™ Master Mix is supplied as a dry reagent to be reconstituted in water. A proprietary freeze-drying process ensures it remains stable at ambient temperatures and does not require refrigeration for transport or storage.

Reconstitution Volumes

Master Mix conc. sought	Diluent volume to add
2X (typical application)	675 µL
5X	270 µL
10X	135 µL

Technical Specifications

Specification	Dimension
DNA-dependent DNA polymerase	Hotstart Taq polymerase (1 min. activation @ 95°C)
Nucleotides	Proprietary mix of dNTPs, including dUTP
Buffer	Tris-HCl pH 8.8
Mg ⁺⁺	1.5 mM (may be adjusted, increased by user)
Storage	15-30°C
Dissolution time	<1s
BSA	Certified BSE free. Contains Bovine Serum Albumin of USA origin.

Storage

Biomeme LyoGreen™ Master Mix should be stored in its original packaging at 15-30°C. If opened in a highly humid environment, the dry reagent resists humidity for up to one hour. Once reconstituted in water, it will remain stable for 24 hours if refrigerated at 2-8°C.

To store the Master Mix long-term, resuspend it to 2X concentration with a diluent containing 8-16% (by volume) molecular biology-grade glycerol. Store at -20°C.



Example Protocols

To use **Biomeme LyoGreen™ Master Mix**, gently tap the glass vial to settle the freeze-dried contents and unscrew the cap. Resuspend the dry reagents and mix with diluent and target-specific primers. Examples of experimental protocols are provided below.

Once all components are combined, the 2X reaction mix is aliquoted into PCR reaction tubes (see: **Biomeme 3-well strips**). Template nucleic acids are added and the tubes are ready for thermocycling and analysis. Non-template controls may use water to substitute DNA.

Disclaimer

This product is for Research Use Only. Biomeme LyoGreen™ Master Mix may not be used for any other purpose, including but not limited to use in therapeutics, drugs, in vitro diagnostics or human health. Biomeme products may not be transferred to third parties, resold, modified for resale or used to manufacture commercial products or to provide a service to third parties without written approval of Biomeme, Inc.

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2X reaction mix guide for 50 x 20 µL PCR reactions	For 5 µL template nucleic acid per reaction	For 10 µL template nucleic acid per reaction
Biomeme LyoGreen Master Mix	500 µL of 2X resuspension	200 µL of 5X resuspension
20X Primer Mix (target-specific; not supplied) Forward primer Reverse primer	e.g., 50 µL of 20X mix	e.g., 50 µL of 20X mix
Diluent (typically nuclease-free water)	200 µL	250 µL
TOTAL VOLUME	750 µL	500 µL
Volume of reaction mix to aliquot into each reaction tube	15 µL	10 µL