



**SPIN TUBES
PRIOR TO
OPENING**

MGB Alert[®]

One-Step Reverse Transcriptase PCR Master Mix



ELITechGroup MDx LLC
21720 23rd Dr SE, Suite 150
Bothell, WA 98021 USA
Telephone: 1-800-453-2725
Sales: MDxSales@elitechgroup.com
Technical Service: mdx@elitechgroup.com

For General Laboratory Use

Intended Use

The MGB Alert One-Step Reverse Transcriptase PCR Master Mix is intended for use in the development of laboratory assays which target RNA analytes using real-time RT-PCR. The MGB Alert One-Step Reverse Transcriptase PCR Master Mix itself generates no diagnostic information or data.

Product Description

The **MGB Alert One-Step Reverse Transcriptase PCR Master Mix** package includes a 2X master mix containing a thermostable polymerase with exonuclease activity and provided in hot-start format. Included are 100X reverse transcriptase, 50X RNase inhibitor, and RNase-free water in separate tubes.

The **MGB Alert One-Step Reverse Transcriptase PCR Master Mix** is formulated as:

- dATP, dCTP, dGTP, and dTTP are included in the formulation
- No UNG is included in the formulation
- No ROX reference dye is included in the formulation

Materials Provided

The MGB Alert One-Step Reverse Transcriptase PCR Master Mix product is provided in four tubes as shown in the table below. The kit contents' quantities are sufficient for 48 tests of 50 µL each.

REF

M800689 – MGB Alert One-Step Reverse Transcriptase PCR Master Mix

Component	Quantity [overflow]	Cap Color	Component Ref
MGB Alert 2X RT-PCR Master Mix	1 × 1200 µL [23%]	Natural	M400660
MGB Alert 100X RT Enzyme Mix	1 × 30 µL [16%]	Black	M400661
MGB Alert 50X RNase Inhibitor	1 × 55 µL [14%]	Brown	M400755
MGB Alert RNase-Free Water	1 × 900 µL [0%]	White	M400662

PCR Preparation

To prepare the PCR reaction, thaw the tube containing the **MGB Alert RT-PCR Master Mix**. Mix by inversion and centrifuge for 5 seconds. It is recommended to keep the RT Enzyme Mix and RNase Inhibitor on ice during PCR setup. An example formulation is shown below, but other formulations may be used for specific purposes—contact Technical Service if assistance is required.

Reagent / Formulation	40 µL Monoreagent + 10 µL Sample (48 RXN)
MGB Alert 2X RT-PCR Master Mix	25 µL
MGB Alert 100X RT Enzyme Mix	0.5 µL
MGB Alert 50X RNase Inhibitor	1.0 µL
20X primers and probes	2.5 µL
Water	11.0 µL
Sample	10.0 µL
Total Reaction Volume	50.0 µL

Thermal Cycler Programming

To ensure optimal enzyme activation and performance, program the thermal cycler as shown in the table below. Times and/or temperatures may need to be adjusted depending on probe and primer design and the specific thermal cycler being used.

Cycles	Step	Time	Temperature
1	Reverse Transcription	10-20 min	45 - 49°C
1	PCR Enzyme Activation	2 min	95°C
40-45	Denaturation	5-10 sec	95°C
	Annealing	30 sec	56°C
	Extension	30 sec	72°C

Storage and Shelf Life after First Opening









The MGB Alert RT-PCR Master Mix should be stored at $\leq -10^{\circ}\text{C}$. Repeated freeze/thaw cycles should be avoided as additional cycles may cause a loss in amplification efficiency.

Open vials must be securely recapped prior to storage. All vials must be returned to the required storage condition of $\leq -10^{\circ}\text{C}$ as soon as possible after the required volumes are removed for the assay.

Expiry Date

The reagent expiry date is printed on the tube labels.

Symbols

	Catalog number
	Contents
	Batch code
	Upper storage temperature
	Date of manufacture
	Use by
	Manufacturer
	Consult instructions for use

Legal Notices

Limited Product Warranty

ELITechGroup MDx LLC warrants that this product will meet the specifications stated above. If any component of this product does not conform to these specifications, ELITechGroup MDx LLC will, at its sole discretion, as its sole and exclusive liability and as the users' sole and exclusive remedy, replace the product at no charge or refund the cost of the product; provided that notice of non-conformance is given to ELITechGroup MDx LLC within sixty (60) days of receipt of the product.

This warranty limits ELITechGroup MDx LLC's liability to the replacement of this product or refund of the cost of the product. NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE PROVIDED BY ELITECH GROUP LLC. ELITechGroup MDx LLC shall have no liability for any direct, indirect, consequential or incidental damages arising out of the use, the results of use or the inability to use this product and its components.

In no event shall ELITechGroup MDx LLC be liable for claims for any other damages, whether direct, incidental, foreseeable, consequential, or special (including but not limited to loss of use, revenue or profit), whether based upon warranty, contract, tort (including negligence) or strict liability arising in connection with the sale or use or the failure of ELITechGroup MDx LLC products to perform in accordance with the stated specifications.

Some components of nucleic acid analysis, such as specific methods and compositions for manipulating or visualizing nucleic acids for analysis, may be covered by one or more patents owned by other parties. Similarly, nucleic acids containing specific nucleotides sequences may be patented. Making, using, offering for sale, or selling such components or nucleic acids may require one or more licenses. Nothing in this document should be construed as an authorization or implicit license to make, use or sell any so covered component or nucleic acid under any such patents.

NOTICE TO PURCHASER: Licensing Information

This product is sold under arrangement between ELITechGroup MDx LLC and Meridian Bioscience allowing for free distribution.

For further information about licenses, contact Meridian Bioscience, 3471 River Hills Drive, Cincinnati, OH 45244. Phone 513-271-3700. Fax 513-271-3702. Email: mbi@meridianbioscience.com.

Trademark Information

MGB Alert® is a registered trademark of ELITechGroup BV

ELITechGroup® is a registered trademark of ELITechGroup SAS