

SmartChip® TB Green® Gene Expression Master Mix

Catalog No.	Amount	Lot Number
640211	2.4 ml	Specified on product label.

Description

2X SmartChip TB Green Gene Expression Master Mix is a special formulation for dye-intercalator real-time PCR experiments on the SmartChip Real-Time PCR System (Cat. No. 640022). The formulation has been optimized for uniform dispensation using the SmartChip MultiSample NanoDispenser (MSND), as well as reproducible PCR-based amplification with SmartChip consumables. This 2X master mix is sufficient for one SmartChip real-time PCR experiment.

Package Contents

- 3 x 800 µl SmartChip TB Green Gene Expression Master Mix.

Storage Conditions

- Store at –20°C.
- Once thawed on ice for use, store any remaining product at 4°C in the dark for up to 6 months.
- Do not refreeze.

NOTE: Precipitate may be observed in the SmartChip TB Green Gene Expression Master Mix. This precipitate does not affect the performance of the kit. The precipitate can be dissolved rapidly by warming the tube to room temperature and mixing for a few minutes. Ensure that the precipitate is fully dissolved before use.

Expiration Date

- Specified on product label.

Shipping Conditions

- Dry ice

Product Documents

Documents for our products are available for download at takarabio.com/manuals

The following documents apply to this product:

- SmartChip MyDesign Kit User Manual
- SmartChip MultiSample NanoDispenser and SmartChip Dispenser Software User Manual
- SmartChip Real-Time PCR Cycler / SmartChip qPCR Software User Manual

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Quality Control Data

The master mix was tested for uniformity of dispensing and reproducible PCR amplification using the MSND Installation Qualification Kit. Master mix lacking a DNA template (NTC) was formulated to contain oligonucleotide primers (200 nM) designed to amplify a 201 bp PCR fragment from bacteriophage *Lambda* genomic DNA, and then dispensed via the MSND in a first pass to one-half of the SmartChip nano-wells. In a second pass, more of this NTC mix was dispensed in an alternating checkerboard pattern on the second half of the chip.

A separate master mix containing positive control material was formulated to contain bacteriophage *Lambda* genomic DNA (6,700 copies/ μ l) and oligonucleotide primers (200 nM) designed to amplify a 201 bp PCR fragment, and then dispensed by the MSND in a checkerboard pattern in the remaining empty wells that alternated with the previously dispensed NTC mix. The chip was blotted dry, sealed, centrifuged to collect the liquid at the bottom of each well, and then run on a SmartChip cycler for 40 cycles. The resulting data demonstrated lack of amplification in the NTC wells, and amplification in all of the positive wells (with a Ct < 20 and a standard deviation of the Cts < 0.6).

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

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NOTICE TO PURCHASER:

Our products are to be used for **Research Use Only**. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our 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 our prior written approval.

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