

DNAble[®] Molecular Detection Kit for MON87705 Event in Soy

Highlights:

- Molecular Detection of MON87705 event in bulk soybean and soy leaf tissue
- Rapid amplification and detection in a 15 minute assay

Contents of DNAble Kit:

- Reaction Buffer
- MON87705 Event Master Mix
- Flat Caps

Materials Not Provided:

- Pipette capable of delivering 10 μ L
- Multichannel Pipette capable of delivering 50 μ L
- Filter Pipette Tips
- Marker
- Extraction Set 9
- AmpliFire DNAble Reader*

*Available through EnviroLogix

Catalog No. DF-009

Part # 12493

Intended Use

This test kit is intended for rapid qualitative detection of DNA of MON87705 Event as expressed in soybean and soy leaf tissue.

How the Test Works

DNAble is an isothermal nucleic acid amplification technology enabling rapid amplification of a specific DNA target. In this test, samples are collected, processed, and the sample extract is added to the reaction buffer. The reaction buffer containing extract is then transferred to the lyophilized Master Mix, containing all the reagents needed to specifically recognize, amplify and detect the MON87705 Event specific DNA in bulk soybean and leaf tissue.

The amplified MON87705 Event specific DNA is detected and the results are displayed and interpreted at 15 minutes using our 8-well DNAble Reader.

Precautions and Notes

DNAble is a highly sensitive assay. Therefore the following precautions are recommended to reduce the chance of sample contamination:

- Clean the work stations and pipettes before and after use with 10% bleach solution
- It is recommended to physically separate sample preparation activities from DNAble assay activity
- Do not reuse kit disposables
- Use fresh pipette tips for each sample, including replicates from the same sample extract

- Discard used tips in a sealed container containing 10% bleach solution
- Use careful pipetting techniques to avoid cross-contamination between samples; avoid reaching over or pipetting over open tubes
- Wear disposable gloves when handling samples

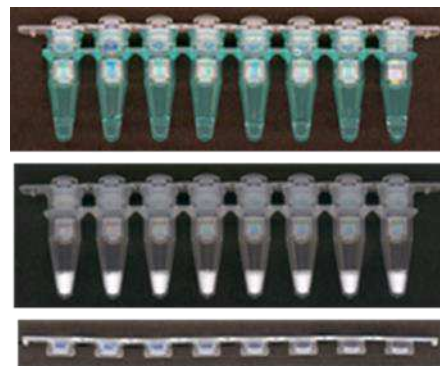
Important: Never open reaction tubes after reaction has occurred, as this will release amplified material into the environment and may contaminate subsequent reactions. Care should be taken when disposing of run reaction tubes to avoid possibility of tube leakage. Place completed reaction tubes back in original zippered pouch prior to disposal.

Kit Components

- Reaction Buffer: Provided in green 8-well strip tubes (6)
- MON87705 Event Master Mix: Lyophilized reagents provided in clear 8-well strip tubes (6 strips).
- Flat Caps: used for capping the clear tubes prior to assay start (6 strips)

Before Testing

- Remove needed DNAble Kit reagents from refrigerated storage. Allow reagents to come to room temperature before opening sealed white pouches.
- Pre-heat heat block to 100°C if testing bulk soybean, to 85°C if testing soy leaf.



- Turn on the 8-well AmpliFire Reader using power button on the right side of the instrument.
- Ensure that all assay reagents, extracted sample, pipettes and Flat Caps are ready for use.



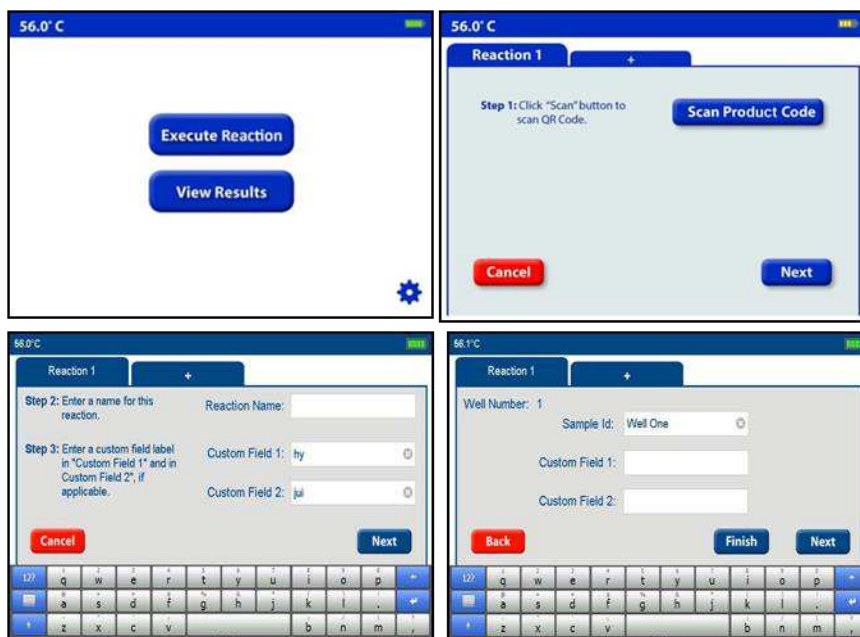
Sample Preparation

1. Follow Sample Extraction Set 9 product insert for sample preparation, extraction, and thermal denaturation.
2. Remove green Reaction Buffer strip tubes from the kit. Mark the left end tube to note orientation.
Important: Tap down or centrifuge green strip tube to ensure that the entire buffer volume is at the bottom of the tubes prior to opening.
3. Pipette **10 µL of diluted sample extract 1** (from Step 1) into well of the reaction buffer 8-well strip tube. Repeat for sample 2-8 in wells 2-8 of the reaction buffer tube, using a fresh pipette tip for each sample.
4. Recap tubes and tap down to ensure all liquid is at the bottom of the tube.

How to Run the DNable Assay

DNable assay protocol

1. On the AmpliFire screen, select “**Execute Reaction**” then “**Scan Product Code**”. Use the barcode on the Master Mix foil pouch to scan the MON87705 Event protocol on the 8-well AmpliFire Reader. “**DF-009**” will display. Select “**Next**”.
2. Under “Reaction Name” enter an appropriate reaction description. **This description is placed at the beginning of the file name.** Select “**Next**”
3. To enter sample specific information, add sample descriptions to the screens for Wells 1 through 8, clicking “**Next**” to advance to each Well. Select “**Finish**” to skip well-specific sample entry.



4. Remove clear Master Mix tubes from the foil pouch and gently tap down to ensure that the white pellet is at the bottom of the tubes.

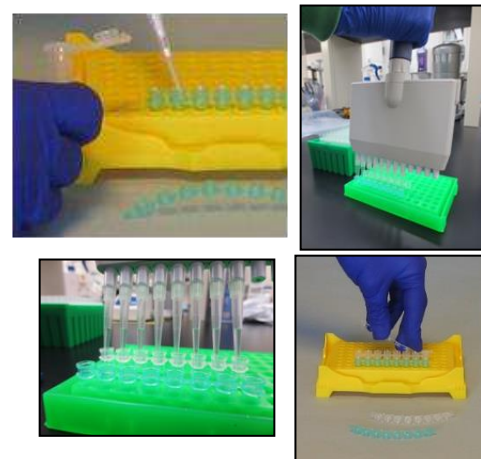
Important: Mark Flat Cap for orientation of the clear Master Mix tubes (writing on clear tubes will interfere with results interpretation or leave marker residue in instrument).

5. Using a multichannel pipette set to 50 µL, **mix** up and down in the green Reaction Buffer tubes containing sample (1-2-3-4 pipette technique). After mixing, transfer **50 µL** from green tubes to clear Master Mix tubes. Discard clear domed caps from green RB1 Buffer Tubes and Master Mix Tubes. Do **not** mix within the clear tube.
6. **Cap** Master Mix tubes with provided **Flat Caps** strip and mark the left end tube to note orientation.

Important: Ensure that the tubes are **completely sealed** with Flat Caps

7. Gently flick down on the resuspended, capped Master Mix to ensure that no bubbles are at the bottom of the tube and that Master Mix is fully resuspended.

8. Inspect tube to ensure that **no air bubbles are present within the sample volume** (a bubble at the top is fine) and that **cap is completely sealed**.



9. When the strip is ready select “**Start**”. Place resuspended, capped clear strip tube in instrument and press “**Ok**”.
10. After 15 minutes, the AmpliFire will produce a short beeping sound and display final results. Results will be interpreted as Not Detected (-), Positive (+) or Invalid (!)*

Important: The full assay time must be complete for result interpretation. (Empty wells will be interpreted as negative.)

* Invalid denotes that the internal control did not amplify as expected and indicates that either the sample has inhibited the reaction or that something was wrong with the Master Mix or testing procedure.

11. After the assay is complete, carefully **remove run reaction strip tubes from instrument and place in opened foil pouch** (used to store Master Mix), seal and discard in waste container.
12. To export results, return to the home screen, then “View Results”. Insert a USB storage device into instrument (left side) and select each run to export and “Export Selected” and “OK.” The results will be saved in a PDF summary report as well as .csv file format.



LIMITED WARRANTY

EnviroLogix Inc. (“EnviroLogix”) warrants the products sold hereunder (“the Products”) against defects in materials and workmanship when used in accordance with the applicable instructions for a period not to extend beyond a product’s printed expiration date. If the Products do not conform to this Limited Warranty and the customer notifies EnviroLogix in writing of such defects during the warranty period, including an offer by the customer to return the Products to EnviroLogix for evaluation, EnviroLogix will repair or replace, at its option, any product or part thereof that proves defective in materials or workmanship within the warranty period.



For Technical Support
Contact Us At:

EnviroLogix Inc.
500 Riverside Industrial Parkway
Portland, ME 04103-1486 USA

Tel: (207) 797-0300
Toll Free: 866-408-4597
Fax: (207) 797-7533

e-mail: dnable@envirolgix.com

Website: www.envirolgix.com

ENVIROLOGIX MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The warranty provided herein and the data, specifications and descriptions of EnviroLogix products appearing in EnviroLogix published catalogues and product literatures are EnviroLogix’ sole representations concerning the Products and warranty. No other statements or representations, written or oral, by EnviroLogix’ employees, agents or representatives, except written statements signed by a duly authorized officer of EnviroLogix Inc., are authorized; they should not be relied upon by the customer and are not a part of the contract of sale or of this warranty.

EnviroLogix does not warrant against damages or defects arising in shipping or handling, or out of accident or improper or abnormal use of the Products; against defects in products or components not manufactured by EnviroLogix, or against damages resulting from such non-EnviroLogix made products or components. EnviroLogix passes on to customer the warranty it received (if any) from the maker thereof of such non-EnviroLogix made products or components. This warranty also does not apply to Products to which changes or modifications have been made or attempted by persons other than pursuant to written authorization by EnviroLogix.

THIS WARRANTY IS EXCLUSIVE. The sole and exclusive obligation of EnviroLogix shall be to repair or replace the defective Products in the manner and for the period provided above. EnviroLogix shall not have any other obligation with respect to the Products or any part thereof, whether based on

contract, tort, strict liability or otherwise. Under no circumstances, whether based on this Limited Warranty or otherwise, shall EnviroLogix be liable for incidental, special, or consequential damages.

This Limited Warranty states the entire obligation of EnviroLogix with respect to the Products. If any part of this Limited Warranty is determined to be void or illegal, the remainder shall remain in full force and effect.

LICENSE

This product is sold under license from PHRI Properties and may be used under PHRI Properties patent rights only for agricultural diagnostics. Dye compounds in this product are sold under license from Biosearch Technologies, Inc. and protected by U.S. and world-wide patents either issued or in application. The license covers agricultural (including GMO), plant pathogen and veterinary use only and may not be used for human *in vitro* diagnostic (IVD) applications.

EnviroLogix, the EnviroLogix logo, DNABLE, and the DNABLE logo are trademarks of EnviroLogix Inc.

© EnviroLogix 2018