ENVIROLOGIX

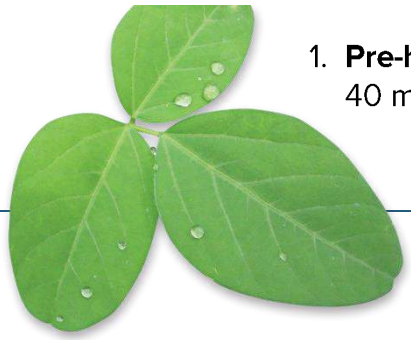
QuickGuide

Molecular Detection Kit for a Genetic Element in Soy

DNAble®

For more information visit envirologix.com/custom-work

1. General Setup



1. **Pre-heat heat block to 85°C** for 15 minutes (wall outlet) or 40 minutes (car plug).

2. **Turn on AmpliFire Unit** and allow to warm to 56°C.

3. Remove EnviroLogix Kit Reagents from refrigerated storage and allow to reach room temperature.

4. **Set up work space**: Racks, pipettes, tips, waste container and kit components.

2. Sample Preparation

SOY LEAF

- Collect leaf samples from top trifoliate of soybean plant
- Using the dropper bottle, add **MB1** Extraction Buffer to the **2 mL line** on the tube

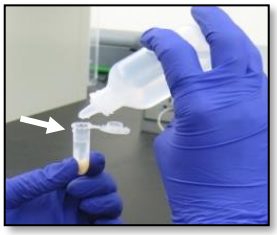
- **Cap the tube around a soy leaf** to create a leaf punch.
- **Submerge the leaf punch** in the buffer using a clean toothpick.
- Close cap tightly.

- **Place in pre-heated block for <u>5 minutes</u>**

- Remove from block & **shake for 5 seconds**
- Place in rack

SOY SEED

- **Place one soybean into an extraction tube** & close cap
- **Crush soybean at least 2 times** using rubber-coated pliers until seed is visibly broken into multiple pieces; flick tube to disperse pieces



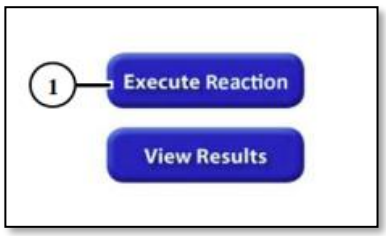
- Using the dropper bottle, add **MB1** Extraction Buffer to the **2 mL line** on the tube
- **Close cap tightly**

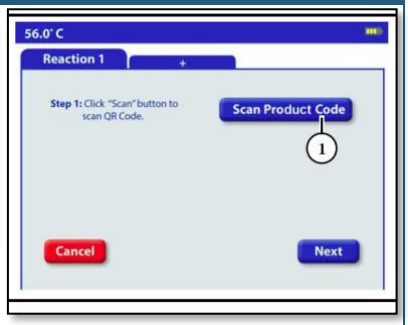
- Place in **pre-heated block for <u>5 minutes</u>**

- Remove from block & **shake for 5 seconds**
- **Flick seed down** to bottom of tube
- Place in rack

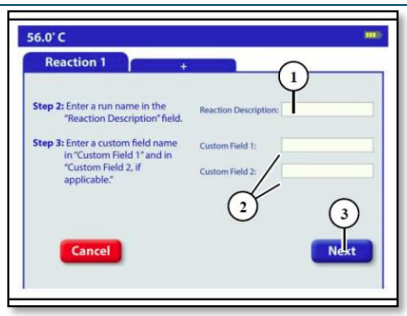
3. AmpliFire Setup

- After warmup, Select "**Execute Reaction**"
- Select "**Scan Product Code**" and scan barcode on Master Mix foil pouch using barcode camera on left side of reader
- Genetic Element _Lot # will display
- Select "**Next**"



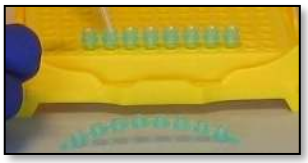


- Under "Reaction Name" enter the **Run Description**
- Do not use Custom Fields
- Select **Next**
- Select **Finish** to skip entry of well-specific information
- Select **Start** on Instrument

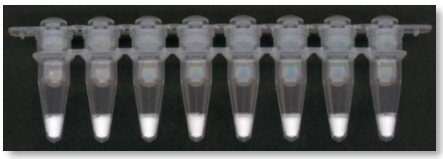


4. DNAble Assay Procedure

- Flick down green tubes prior to opening so that buffer is at bottom of tubes. Remove clear domed caps and discard them. Mark green tube for orientation.
- Use ***WHITE*** MiniPet to transfer **10 µL of leaf or seed sample** to bottom of the green Reaction Buffer vials



- Using the **ORANGE** MiniPet , **mix** up and down in the green tube and then transfer **25 µL** to clear Master Mix tubes (Use 1,2,3, 4 – 1 pipetting technique)
- Do **not** mix within the clear tube



- Recap with **Flat Caps (seal completely!!!)**
- Flick and tap down several times to remove air bubbles. **No bubbles** in bottom of tubes!!

- Place capped and inspected clear strip tube in instrument and **immediately** press "OK"
- After 7 minutes, results will be interpreted as **Not Detected** (-), **Positive** (+), or **Invalid** (!)
- After assay is complete, **remove run reaction strip tubes** and discard in opened foil pouch. **Never open a completed reaction tube!**
- View results from the Home Page (View Results)
- Clean up station after recording results