

# **Royal Rapid Test**

# BT Cry1Ab/Ac

# **User Instruction**

Catalog Number: A06-04-413



### **INTENDED USE**

Royal Rapid Test for Cry1Ab/Ac is intended to determine the presence of the Cry1Ab/Ac Bt endotoxins in genetically modified organisms.

Limit of detection: 2 ng/ml or 1 in 200 Kernels

#### **STORAGE**

Royal Rapid Test in seal pouch should be stored at 2~30°C. Do not freeze the test device.

The test device should be kept away from direct sunlight, moisture and heat.

#### **CONTENTS**

Tap water

Ш	Pouch (contains: test strip and desiccant)
	Test instructions.
THINGS YOU NEED	
	Tube
	Pestle (for leaf samples only
	Seed crusher (for seed samples only)

## **SAMPLE PREPARATION**

#### To extract seed:

A single seed sample can be grounded and then extracted with water in a tube. The sample preparation is a crucial procedure for the proper function of the test. The ratio of water in milliliters (ml) to the weight of the seed sample (g) should be close to 1.25. Seal the tube cap and shake the tube gently for 15~25 seconds. Allow the solid material to settle to the bottom of the tube. And the sample will be ready for testing.

#### To extract leaf tissue:

Take a 1-inch x 1-inch leaf punches from the sample leaf tissue; push the leaf punches into the tube by a pestle. Then squeeze 10 drops of water into tube and grind the tissue using the pestle.

The test is suitable for testing both leaf tissue and seed of corn, cotton, and other crops.

Leaves, seedlings, or seeds must be ground and diluted with buffer or water. For best result, different samples should be diluted with water in different ratio. Let the paste set for at least 45 seconds before testing with the test kits.



# For single corn leaf:

Leaf to water ratio will be 1:20

Approximate weight of leaf: 0.2 grams

Approximate volume of water/buffer 4 ml

For corn seeds:

Corn Seeds to water ratio will be 1:5

Approximate weight of seed 0.2 grams

Approximate volume of water/buffer 1 ml

## For multiple (composite) leaves:

Leaf to water ratio will be 1:10

Approximate weight of leaf: 0.2 grams

Approximate volume of water/buffer 2 ml

#### For Cotton seeds:

Cotton Seeds to water ratio will be 1:10 Approximate weight of seeds: 0.2 grams Approximate volume of water/buffer 2 ml

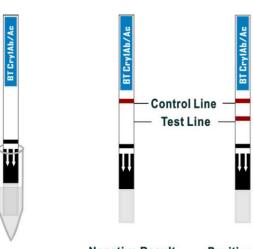
#### **HOW TO RUN THE STRIP TEST**

- Remove the testing device from the foil pouch by tearing at the notch. Hold the strip at the colored end. Do not touch the arrow end or the test window (the middle part of the strip).
- Holding the strip vertically, immerse the end of the strip with the arrows into the specimen. Do not 2. immerse past the MAX line.
- 3. Take the strip out when the sample has migrated to the test window (about 10 seconds). Lay the strip (MAX side facing up) flat on a clean, dry, non-absorbent surface.
- > Wait 2~5 minutes for the result. If there is only one line appears, allow the strip to develop for an extra 10

minutes before making a final assay interpretation. The result will be invalid after 30 minutes.

#### INTERPRETING THE RESULTS

The appearance of control line indicates that the strip has functioned properly. If the control line does not appear in 10 minutes, using another strip to retested the example. If the sample extract contained Cry1Ab or Cry1Ac endotoxins, a second line (Test Line) will develop on the membrane under the control line. The test is complete and the sample is positive for Cry1Ab or Cry1Ac.



**Negative Result Positive Result** 

For technical assistance or questions regarding the use of this test,

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