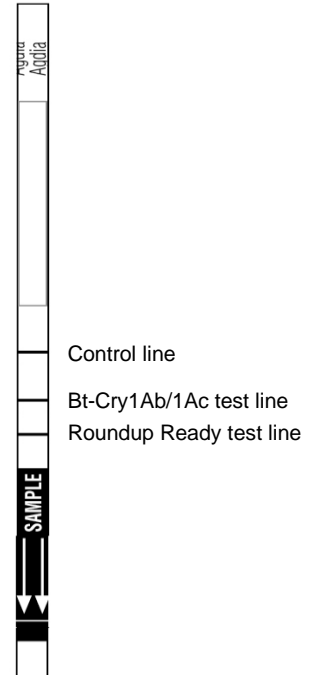


Bt-Cry1Ab/1Ac and Roundup Ready[®] ImmunoStrip[®] Test

Strip test for the detection of Bt-Cry1Ab/1Ac and CP4 EPSPS transgenic protein
Catalog no. STX 74500

CONTENTS

Size 0050	Item	Quantity
	ImmunoStrip [®] Sample extract buffer (required) Instructions	50 strips Sold separately 1
Size 0008	Item	Quantity
	ImmunoComb [®] , 12 strips per comb Sample extract buffer (required) Instructions	8 combs Sold separately 1
Size 0012	Item	Quantity
	ImmunoComb [®] , 8 strips per comb Sample extract buffer (required) Instructions	12 combs Sold separately 1



STORAGE

Keep the strips tightly sealed in the container with the desiccant at all times. Store container in the refrigerator (4°C) between uses. The sample buffer should also be refrigerated (4°C) when not in use.

YOU WILL NEED

- Scissors, pen, and timer
- **SEB4** sample extraction buffer, available as:
 - Sample extract bag filled with SEB4 buffer (Agdia catalog no. ACC 00958)
 - SEB4 powder (Agdia catalog no. ACC 01958)
- Seed crusher and plate (available thru HyPure) or Agdia sample extract bag and rubber mallet

SAFETY

Sample extract buffer and strip tests are non-hazardous.

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INTENDED USE

This ImmunoStrip test is intended for seed quality purposes to determine the presence of the insect resistance traits (Bt-Cry1Ab or Bt-Cry1Ac) and the Roundup Ready[®] trait (CP4 EPSPS) in transgenic crops.

This test system has been validated for testing individual cotton seeds.

This is a multi-analyte ImmunoStrip that has two specific test lines. The test line for Bt-Cry1Ab/1Ac recognizes both Bt-Cry1Ac and Bt-Cry1Ab. It shows no cross reaction to Bt-Cry1F, Bt-Cry2A, BXN, CP4 EPSPS (Roundup Ready) or PAT proteins. The Roundup Ready test line has shown no cross-reaction with Bt-Cry1Ab, Bt-Cry1Ac, Bt-Cry1F, or Bt-Cry2A.

SAMPLE PREPARATION

Leaf extraction

For leaf samples use Agdia's disposable sample extraction bags, a clean mortar and pestle, or any other grinding device to help extract samples.

Tissue	Ratio tissue to SEB4 buffer (weight/volume - g/ml)	Example
LEAF	1:20	0.15 g leaf: 3 ml buffer

Single Seed extraction

Single seeds can be crushed with a seed crusher or hammer. Determine the average weight of the seed and add the appropriate volume of SEB4 buffer following a 1:20 (w/v) seed to buffer ratio. Let the extract sit for at least 1 minute before testing with the ImmunoStrip.

Tissue	Ratio tissue to SEB4 buffer (weight/volume - g/ml)	Example
SEED	1:10	0.2 gram tissue: 2 ml buffer

TEST PROCEDURE



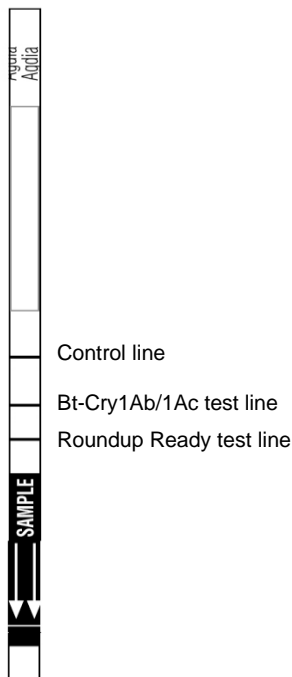
Remove the Bt-Cry1Ab/1Ac - RR ImmunoStrip from the container. When handling the strips, always grasp the top of the strip marked with the test name. Do not remove protective covering.

Keeping the strips in a vertical position, insert the ends of the strips marked "sample" into the extract of the testwell, micro tube or sample extract bag. Do not allow much more than 0.5 cm or ¼ inch of the ends of the strips to be submerged in the extract. The end of the strip should remain in the extract during the test.

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RESULTS



The control line can appear in as little as 3 to 5 minutes. Maximum reaction occurs in 30 minutes at which time the ImmunoStrip should be removed from the buffer. Use the image to the left as a guide to determine results. If necessary, align the ImmunoStrip with the image to determine the exact positions of the test lines and the control line.

The **control line** assures that the test is working properly. If the **control line** does not appear, the test is invalid.

If the sample is positive for the Roundup Ready trait, the Roundup Ready[®] **test line** will appear. If the sample is positive for Bt-Cry1Ac, the Bt-Cry1Ab/1Ac **test line** will appear. If the sample is positive for both traits, both **test lines** will appear.

If the sample is negative for a trait, the corresponding **test line** will not appear.

Note: If you wish to keep the ImmunoStrip as permanent records, cut off the sample pads (green ends marked “sample”) and discard. This prevents any liquid still in the sample pads from interfering with results. Then blot the ImmunoStrips between paper towels.

LIMITATIONS

The following is a description of factors that could limit test performance or interfere with proper test results.

- Expiration: Test should be used within 1 year of purchase.
- Temperature extremes: Avoid exposing the strips to freezing conditions or extreme heat. Do not leave the strips in a closed car when temperatures will be exceedingly high.
- Storage: Test results may be weak or the test may fail if the storage instructions are not followed properly. If the ImmunoStrip package is left open too long, the strips will absorb moisture. This can affect test results.
- Sample Dilution: Strip performance is very dependent on the proper sample dilution. The strip will not properly absorb sample extracts containing large amounts of tissue.
- Test Procedure: The assay has been optimized for use with this protocol. Deviation from this protocol may invalidate the results of the test.
- Submerging the strip: Test strips must not be submerged more than 0.5 cm or ¼ inch. If too much of the strip is submerged, certain components of the strip are released into the sample instead of being wicked upward by the strip. This most often results in a failed test in which no control line forms.

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LIMITED WARRANTY

Agdia, Inc. ("Agdia") warrants the products manufactured by Agdia will be free of defects in materials and workmanship when used in accordance with the applicable instructions for a period of one year from the date of shipment of the products or if shorter, for a period not to extend beyond a product's printed expiration date.

The sole obligation of Agdia shall be to repair or replace the defective products in the manner and for the period provided above. Under no circumstances, whether based on this Limited Warranty or otherwise, shall Agdia be liable for any incidental, consequential, direct, indirect, or special damages.

Roundup Ready[®] is a registered trademark of Monsanto Company.

For technical assistance or questions regarding the use of this test system, please contact Agdia, Inc. Monday-Friday.

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