

**Q** agdia<sup>®</sup>

Leading the way to healthy crops.

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# USER GUIDE: Agdia ImmunoStrip® Test

#### KIT INFORMATION

#### **Intended Use**

The ImmunoStrip test is a rapid means of screening crops for the presence of pathogens. ImmunoStrip tests require no equipment or expertise to run. Results are obtained in as little as a few minutes making them perfect for use in the field or greenhouse. The ImmunoStrip must be used with **SEB1** sample extraction buffer for leaf. Do not use any other sample extract buffer.

#### Storage of Kit

ImmunoStrips should be stored refrigerated (4°C) between uses and tightly sealed in the desiccated container at all times.

Kit contents should be warmed to room temperature prior to use.

#### ImmunoStrip Kit (ISK) Includes

- ImmunoStrips
- SEB1 sample extraction bags
- User guide

ImmunoStrips (STX) purchased separately do not include buffer filled mesh bags.

#### What's required to perform the assay?

- Scissors, knife or razor blade
- SEB1 sample extraction buffer
- Sample extraction device (Agdia sample extraction bags are recommended)
- Letter holder or other device to hold sample extraction bags

### PERFORMING THE ASSAY (\*Special Attention Required)

### **Prepare Sample**

Collect a sample section that is approximately \*1 inch square in size. It is recommended that samples be taken from areas of the plant that exhibit symptoms of disease.



Note: It is recommended that you use a clean cutting tool for each sample. If you must reuse the cutting tool, first wipe off the cutting edge and disinfect in a 10% bleach solution before cutting into a new sample.



Cut open the sample extraction bag along the top of the label. Be careful not to spill the buffer.

**\*SEB1** Buffer is required to perform this assay with leaf tissue.



Insert the sample between the mesh linings near the bottom of the sample extraction bag.



Extract the sample by rubbing it gently between the mesh linings with a blunt object such as a pen or permanent marker.

Depending on the sample type, the color of the solution will turn a light brown or green color once the sample is adequately extracted.

### **Perform Assay**



Insert the ImmunoStrip into the channel portion (no mesh) of the buffer filled bag.

\*Be sure to insert the "sample" end of the strip no more than %" or to the white line on the ImmunoStrip label.



Allow the ImmunoStrip test to remain in the sample extract for 30 minutes. Positive results may be visible in as little as 5 minutes. Lower titer samples may take up to 30 minutes.

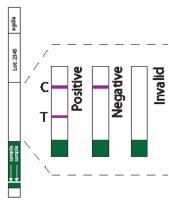
## 7 Interpret Results

Remove test strip from extract and interpret results (see illustration).

If only the control line (C) is visible, this indicates a negative result.

If the test line (T) is also present at any intensity of pink / purple, this indicates a positive\*\* result.

If no lines are present, the test is invalid (see troubleshooting).



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## **SAFETY**

ImmunoStrips and sample extraction buffer are non-hazardous.

## **TROUBLESHOOTING**

Control line did not develop.	This situation is generally caused by over-submergence of the test strip in the sample extract.  Results in this situation should be considered invalid and the test should be repeated.
Test runs very slow or not at all.	This can be caused by using too much tissue for extraction. Repeat the test using less tissue or by diluting your sample extract 1:10 with SEB1.
	If the above is not the case, make sure the test components were warmed to room temperature before use and are within their expiration date.
Test has a green or pigmented test line.	This can be caused by using too much tissue for extraction. Repeat the test using less tissue or by diluting your sample extract 1:10 with SEB1.
	**In rare cases, the tissue type may cause a pigmented line. Green lines should not be considered a positive result. Red, orange, or purple fruits may cause what appears to be a positive test line. It is recommended that you contact Agdia before testing these types of samples.
Test and / or control line is weak.	Make sure the test is within its expiration date.
	If kit contents were left open too long, the strips could have absorbed moisture, which can affect test results. Be sure to always keep the ImmunoStrip vial tightly sealed between uses.
	The test line may be weak due to low pathogen titer in the sample.

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