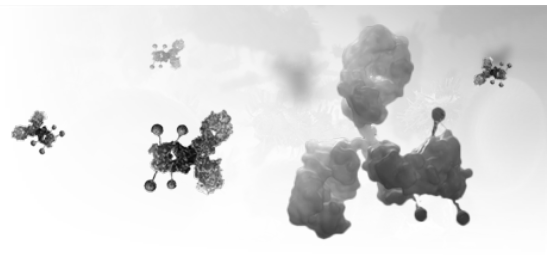


Ferulic Acid Rapid Test (DTS835L)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Size 50T

Intended Use

Ferulic Acid Rapid Test is a rapid, one step test for the qualitative detection of ferulic acid in roots, leaves and stems of plant samples.

General Description

Ferulic acid (FA) is a hydroxycinnamic acid, a type of organic compound. It is an abundant phenolic phytochemical found in plant cell wall components such as arabinoxylans as covalent side chains. It is related to trans-cinnamic acid. As a component of lignin, ferulic acid is a precursor in the manufacture of other aromatic compounds.

Principles of Testing

The Ferulic acid rapid test is based on competitive inhibition immuno-chromatographic principle. In the flow process, ferulic acid in the sample combined with ferulic acid specific colloidal gold-labeled monoclonal antibody, inhibit the combination between antibody and ferulic acid-BSA conjugate on Test line of NC membrane, lead to the color change of Test line. When the sample has no biotin residue or concentration lower than detection limit, T line appears; when the concentration is equal to or higher than detection limit, T line has no color. No matter whether there is ferulic acid residue in sample, C line will appear, it means the test is valid.

Reagents And Materials Provided

1. Ferulic Acid Testing Device: 50 tests/kit
2. User Instrcutions

Materials Required But Not Supplied

1. Specimen collection container.
2. Clock or timer.
3. Centrifuge capable of 3,000 g centrifugal force.
4. Homogenizer.

Storage

Store at 4-30°C, DO NOT FREEZE or use beyond the expiration date. The shelf life is 12 months.

Specimen Collection And Preparation

1. Collect a proper amount of root, stem or leaf samples of plants and air dry.
2. Homogenize the samples with homogenizer and powder finely.
3. Weigh 10 mg homogenate into a 10 mL polystyrene centrifuge tube, then extract with 5 mL tap water for 30 min at room temperature with shaking.
4. Centrifuge at 3000g for 1 minute at room temperature (20-25°C). Then transfer the supernatant to another tube and prepare for testing.

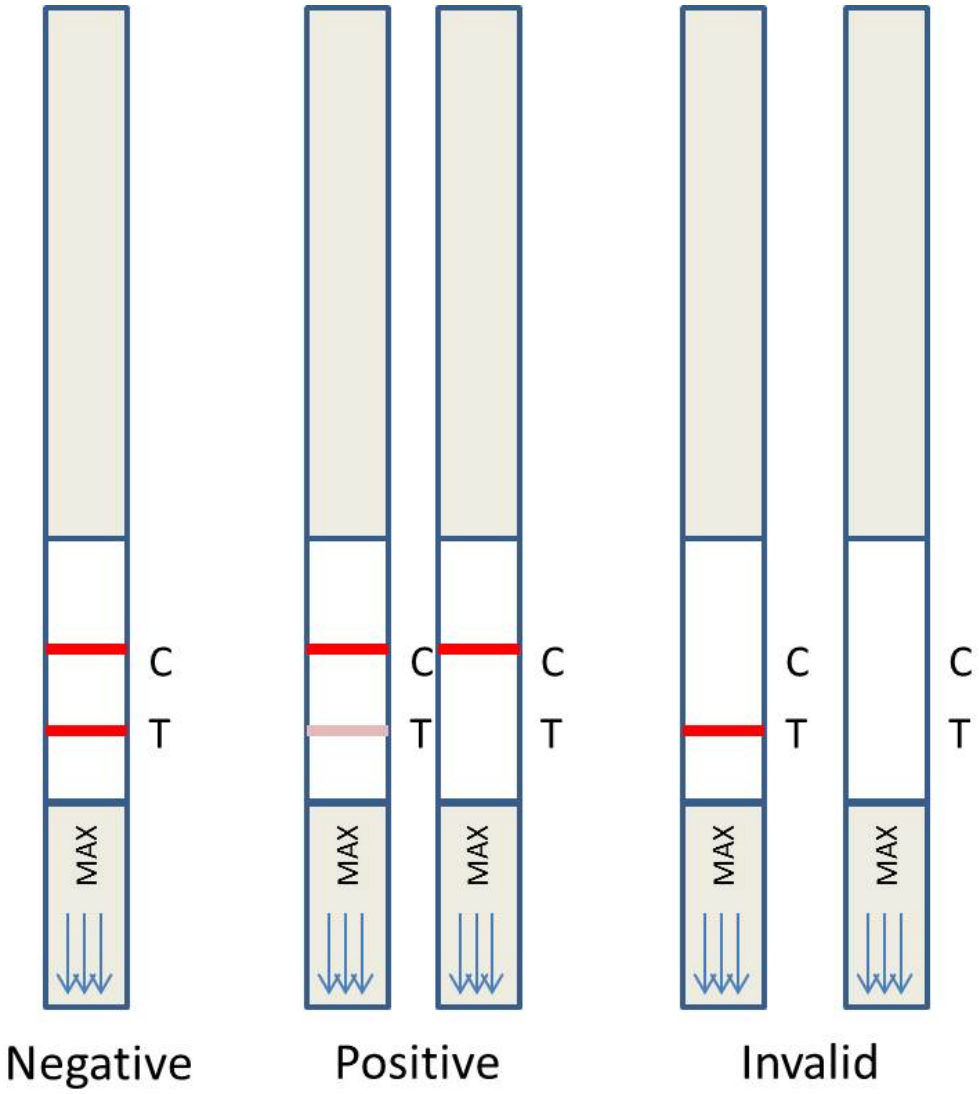
Assay Procedure

NOTE: Bring an unopened foil pouch and the sample specimen to room temperature before performing the test.
1. Remove the test strip from the sealed pouch.
2. Take proper volume of samples into a 1 mL centrifuge tube. Insert the "MAX" end of the strip into the tube; make sure it is dipped into the liquid.
3. Incubate at room temperature for 10 min.
4. Read the result at 10-15 minutes.

Important: Discard the test device after reading the result. Do not interpret the result after more than 15 minute.

Interpretation Of Results

Negative (-): Color of Test Line (T line) is deeper than Control Line(C line) or the same color, indicating that the content of ferulic acid in sample is lower than the LOD of the kit.
Positive (+): No color shows in Test line or Color of Test Line is lighter than Control Line indicating that the ferulic acid in sample is higher than the LOD of the kit.
Invalid: No color shows in Control Line, indicating the operation is incorrect or the test kit is out of date. In this case, please read the instruction again carefully, and repeat the assay with a new test strip.



Detection Limit	The detection limit of ferulic acid with this test is about 10 ng/mL (ppb)
Precautions	1. The test strip can be used only once at room temperature, do not use test strip out of expiry date. 2. Do not touch the white membrane surface in the middle of test strip, avoid sunlight and fan blowing directly. 3. The sample needs to be fresh and unpolluted, return to room temperature before test for samples at cool or frozen storage. 4. Test again for positive results. 5. Please contact the supplier for any questions. 6. The results of this test if for reference only, to confirm, please refer to National standard.
Limitations	1. Although the Ferulic Acid Rapid Test is very accurate in detecting elevated ferulic acid levels, a low incidence of false results can occur.