

Artron GeneTrue test Kit for Phytase

Catalog Number: A07-06-413

Rapid Test User Instruction



- **INTENDED USE**

The Artron GeneTrue Rapid test Kit for Phytase is intended to determine the presence of Phytase in genetically modified organisms.

Phytase is currently used as an additive in animal feed to breakdown phytic acid in corn, which holds 60% of the phosphorus in corn. Phytase increases phosphorus absorption in animals by 60%. Phosphorus is an essential element for the growth and development of all animals, and plays a key role in skeletal structures and vital metabolic pathways. Phytase, as an additive for animal feed, is mandatory in Europe, Southeast Asia, South Korea, Japan, and other regions for environmental purposes.

Phytase transgenic corn, developed by and licensed from Chinese Academy of Agricultural Science (CAAS) after a 7 year study, will allow animal feed producers the ability to eliminate purchasing phytase and corn separately. It will eliminate the need for mixing the two ingredients together, saving time, machinery, and labor for the animal feed producers

- **STORAGE**

The Artron Rapid test Kit should be stored and sealed in its container at room temperature. It is recommended to store the strip in the refrigerator (4°C) between uses, prolonging its shelf life.

* For best results, keep the strip in dry before use.

- **CONTENTS**

Items	Quantity
Strip	25 Strips
Instructions	1

- **MATERIALS REQUIRED (BUT NOT PROVIDED)**

- Tube
- Pestle (for leaf samples only)

- Seed crusher (for seed samples only)
- Tap water

• **SAMPLE PREPARATION**

To extract seed:

A single seed sample can be ground up 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 10:1. 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. Once the solid material has settled, the sample will be ready for testing.

To extract leaf tissue:

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

Limit of detection: 1 ng/ml or 1 in 1000 Kernels

The test is suitable for testing both leaf tissue and seeds of corn, cotton, and other crops. Leaves, seedlings, or seeds must be ground up and diluted with a buffer or water. For best results, different samples should be diluted with water in different ratios. Let the paste set for at least 45 seconds before testing with the test kits.

For a 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 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 corn seeds:

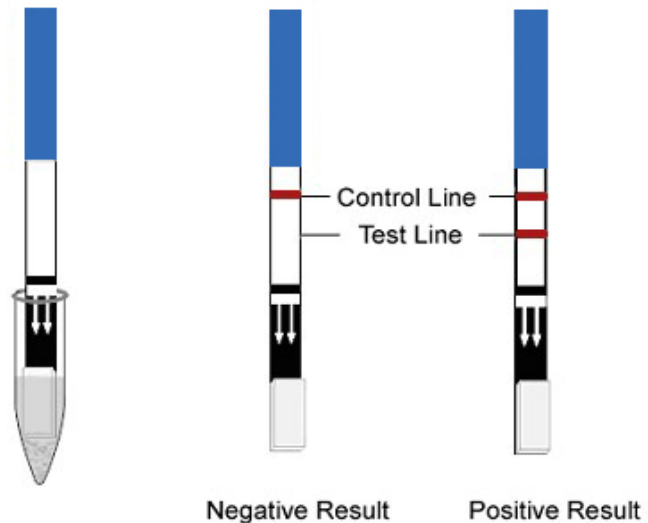
Corn Seeds to water ratio will be 1:10
 Approximate weight of seed 0.2 grams
 Approximate volume of water/buffer 2 ml

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**

Allow refrigerated canisters to come to room temperature before opening.
 Remove the Artron Strip to be used, and reseal the canisters immediately.
 Avoid bending and getting the strips wet; always grasp the top of the strip marked with the test name.
 Keep the strips in a vertical position, and insert the ends of the strips into the tube or bag that contains the sample.



Do not allow sample to pass the “Max” line.

Wait 2-5 minutes for the result. If 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 a control line indicates that the strip has functioned properly. If the control line does not appear in 10 minutes, use another strip to retest the sample. If the sample extract contained phytase, a second line (Test Line) will develop on the membrane under the control line. This signifies that the test is finished and the sample is positive for phytase.

For technical assistance or questions regarding the use of this test system, please call Artron BioResearch Inc.

Phone: 604-415-9757

Fax: 604-415-9795

Email: info@artronbio.com

LIMITED WARRANTY

Artron BioResearch Inc. warrants the products manufactured by Artron will be free of defects in materials and workmanship when used in accordance with the applicable instructions for a period of one and half 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 Artron shall be repair or replace the defective products in the manner and for the period above. Under no circumstances, whether based on this Limited Warranty or otherwise, shall Artron be liable for any incidental, consequential, direct, indirect, or special damages.