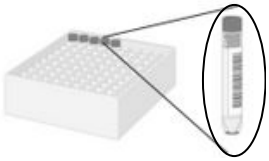
Root + Petiole **Sample Collection Guide**

This document details the steps to collect root and petiole samples for testing in TUMI Genomics laboratories. Turnaround for results is 24 - 48 business hours.

1 Prepare Materials

Provided Materials



Testing Vials

Extra barcode stickers

User Supplied Materials

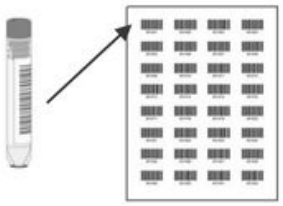
Disposable gloves

10% Bleach solution

Paper Towels

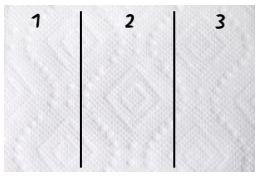
2 Identify and Label Plant

Identify the plant(s) to be tested. Add the barcode sticker that corresponds to the selected testing vial to the plant. The barcode number will appear in your testing report.



Prepare Paper Towel

Section a clean paper towel to collect samples. This will prevent sample confusion and cross-contamination.



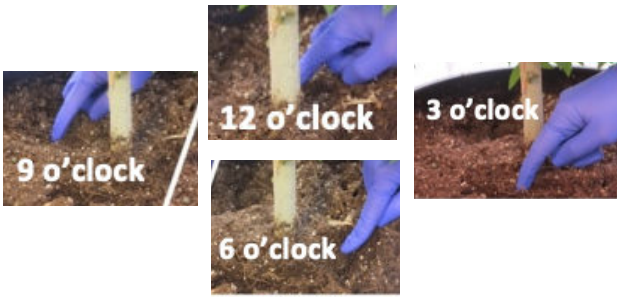
3 Collect Petiole Tissue

Collect 1 petiole sample from the middle 2/3rds of each plant. Try to cut the petioles close to the main stem if possible. Place petiole on the paper towel.

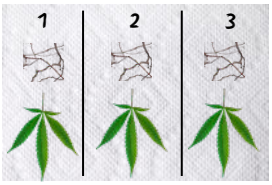
4 Collect Samples

Lightly brush topsoil of plant to reveal surface root. Pull gently on root to break it away from the root mass. Only a small amount of root tissue is needed (~the length of a pinky fingernail).

Using a gloved hand, collect four root samples evenly spaced around the base of the plant.



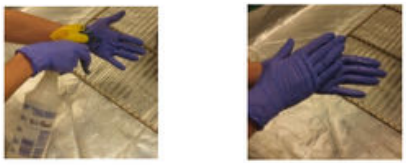
Place each bundle of roots on the paper towel with the corresponding petiole. **Each plant should have 1 petiole sample and 4 root samples.**



5 Sterilize Hands and Tools Between Plants

Soak trimming tool in 10% bleach for 60 seconds. If handles of trimming tool were not submerged, spray with 10% bleach and spread evenly on surface.

Spray gloved hands with 10% bleach and spread evenly as you would hand sanitizer.



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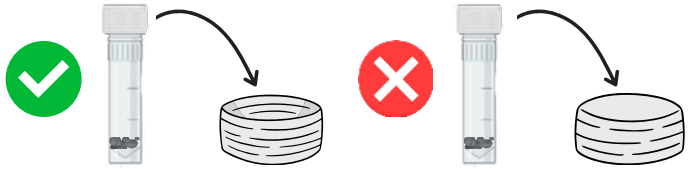
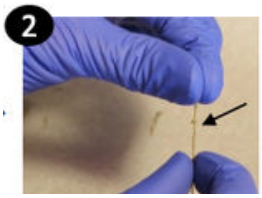
6 Add Tissue to Testing Vial

Remove lid of sample tube and place on a clean surface facing up. Take care to not expose inside of cap to contaminated areas as this could affect the accuracy of your results.

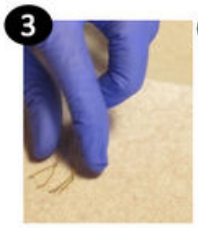


Root Tissue

Remove excess soil or growing medium from root tissue by gently sliding hands along the root hair. The small amount of growing medium that remains will not interfere with the assay.



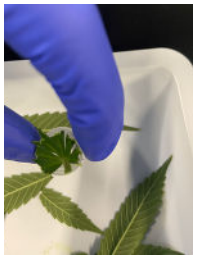
Gather root samples together. Using the trimming tool, cut about ¼ of an inch from root samples into the testing vial.



Petiole Tissue

Collect tissue from the center of the fan leaf, the point where the stem meets the leaves.

Lay the leaf on a flat surface. Using the cap of the sample tube, push down and twist until the sample is cut from the tissue.



With the sample stuck to the inside of the lid, place the lid on the tube and shake to bring the root and leaf tissue to the bottom of the tube. Your sample is now ready to ship.

7 Ship Samples to TUMI Genomics

Confirm the lid is screwed on tightly. Place vials with prepared tissue in the box they arrived in or a bubble mailer. Ship samples to:

TUMI Genomics
320 East Vine Drive Suite 129
Fort Collins, CO 80524

International Clients

USDA Permit Packet

This packet must be printed and packed into your return shipment to the TUMI Genomics lab.

Shipping Guide

This video details how to pack and ship your samples to return to the TUMI Genomics lab.

Common Questions

How long does the test kit last?

The testing vials are good for three months at room temperature and up to a year if stored in the refrigerator.

Should I add extra tissue for a better result?

No, excessive tissue can reduce the accuracy of the test. The most critical factor is to include small amounts of tissue from multiple parts of the plant, including the root.

How long is the sample stable after collection?

We encourage customers to ship samples back to us as soon as possible. However, tissue samples are stable in the collection solution for a week or more. If storing for a prolonged period (more than 3 days), refrigeration is recommended.

Should I ship my samples on ice?

Ice is not necessary when shipping samples. The stabilization solution is very effective even in warm, summer temperatures.

Have more questions?

See the FAQ section of our website or contact us at (720) 807-8864 or sales@tumigenomics.com