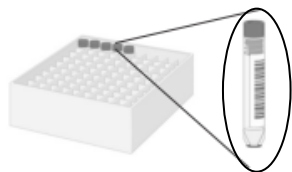


# Root Sample Collection Guide

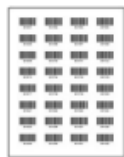
This document details the steps to collect root samples for testing in TUMI Genomics laboratories. Turnaround for results is 24 - 48 business hours.

## 1 Prepare Materials

### Provided Materials



Testing Vials



Extra barcode stickers

### User Supplied Materials



Disposable gloves



10% Bleach solution



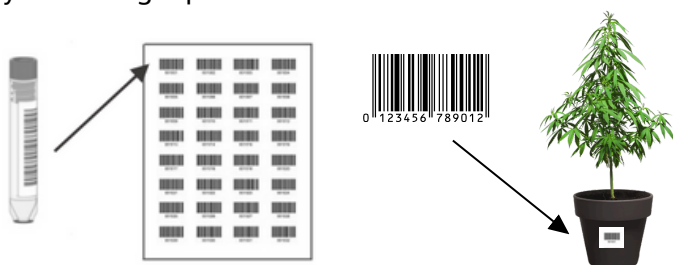
Scissors



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.



## 3 Collect Root Tissue

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).

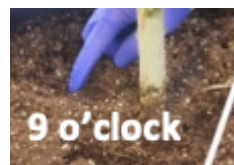


## 3 (CONT) Collect Root Tissue

Collect four root samples evenly spaced around the base of the plant.



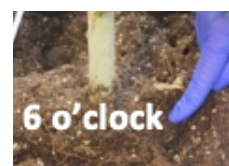
12 o'clock



9 o'clock



3 o'clock

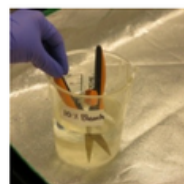


6 o'clock

Place root tissue on a clean paper towel, or directly into sample tube after brushing off excess growing medium (see section 5).

## 4 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.

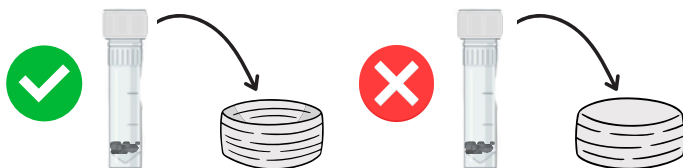


Spray gloved hands with 10% bleach and spread evenly as you would hand sanitizer.

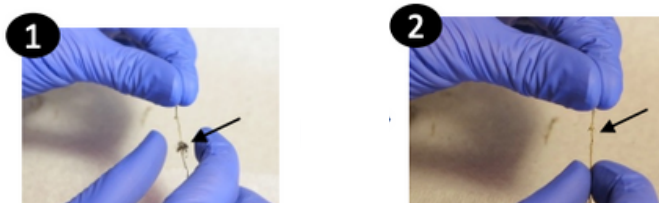


## 5 Add Tissue to Testing Vial

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.



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  $\frac{1}{4}$  of an inch from root samples into the testing vial.



Screw the lid back on sample tube **tightly**. Tap the tube gently on a hard surface to gather the tissue in the solution at the bottom of the tube.

## 6 Prepare Sample

Shake the tube vigorously for 10- 15 seconds. A white foam will appear at the top of the tube, which is normal. 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](mailto:sales@tumigenomics.com)