

ENVIROLOGIX Inc. - Environmental & Food Monitoring Kits: Pesticides

IMIDACLOPRID For Seed Testing (ELISA Kit)

● Intended use

The Envirologix Imidacloprid Plate Kit Is Being Developed For The Quantitative Laboratory Detection Of Imidacloprid Pesticide Residues On Coated Seeds. With The Extraction And Dilution Protocol Described Here, The Detection Range Is 233 To 11,667 Parts Per Million (Ppm) On Coated Seeds.

● General

The EnviroLogix Imidacloprid Plate Kit is a competitive Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, Imidacloprid pesticide residues in the sample extract compete with enzyme (horseradish peroxidase) labeled Imidacloprid for a limited number of antibody binding sites on the inside surface of the test wells. After a simple wash step, the outcome of the competition is visualized with a color development step. As with all competitive immunoassays, sample concentration is inversely proportional to color development.

Darker color = Lower concentration

Lighter color = Higher concentration

The EnviroLogix Imidacloprid for Seed Testing Plate Kit can be used in the following applications:

- Seed Treatment Quality Control.
- Batch Controls To Monitor Coating Concentration.
- Intra-Batch Testing Of Seed To Seed Consistency.

Materials Provided:	Materials Required But Not Provided:
<ul style="list-style-type: none">- 8 x Strips of 12 Antibody-Coated Wells each, in plate frame.- 1 x Vial of Imidacloprid Negative Control.- 1 x Vial of 0.07 ppm Imidacloprid Calibrator.- 1 x Vial of 0.7 ppm Imidacloprid Calibrator.- 1 x Vial of 3.5 ppm Imidacloprid Calibrator.- 1 x Bottle of Imidacloprid-enzyme Conjugate.- 1 x Bottle of Substrate.- 1 x Bottle of Stop Solution.	<ul style="list-style-type: none">- Methanol, reagent grade, pesticide free, 100 mL per sample.- Glass or plastic bottles with at least 100 milliliter (mL) capacity, for seed extraction.- Mechanical Shaker.- Glass Vials with Teflon-lined caps for sample extract storage.- Distilled or Deionized Water for dilution of seed extracts.- Glass Tubes or vials for dilutions.- Positive-Displacement Pipette and tips which will measure 20 microliters (µL).- Vortex Mixer.- Disposable Tip, Adjustable Air Displacement Pipette which will measure 100 µL.- Marking Pen (indelible).- Tape or Parafilm.- Timer (1 hour and 30 minutes).- Cool Tap or Distilled Water for rinsing wells.- Microtiter Plate Reader or strip reader.- Microtiter Plate Washer (optional).- Twelve-Channel Pipette that will measure 100 µL (optional).- Racked Dilution Tubes for loading samples into the plate with a 12-channel pipette (optional).- Orbital Plate Shaker (optional).

Kit Specifications:

Plate Format:	- 96 Well.
Time Requirement:	- 2 h 15 min.
Detection Range:	- 233 to 11,667 ppm.

Cross Reaction:
(Limit of Detection)
Measurement:
Product ID #:

- Imidacloprid (0.06 ppm).
- Imidacloprid Olefin (0.001 ppm).
- Microtiter Plate Reader or strip reader.
- AP006ST.