

## ENVIROLOGIX Inc. - GMO Monitoring Kits

# Cry1F – QUALIPLATE™ KIT (ELISA Kit)

### ● Intended use

The EnviroLogix QualiPlate™ Kit for Cry1F is designed for the qualitative laboratory detection of Cry1F endotoxin in corn grain, seed or leaf samples. Two assay protocols are presented: The High Sensitivity Protocol will detect the Cry1F protein found in 0.25% Herculex I corn (1 positive kernel in 400 conventional kernels) and requires 2.5 hours to run. The Rapid Protocol (1.5 hours total) is intended for use in screening individual seeds or leaf samples for the presence of Cry1F.

### ● General

The EnviroLogix QualiPlate™ Cry1F Kit is a “sandwich” Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, corn product sample extracts are added to test wells coated with antibodies raised against Cry1F protein. Any Cry1F present in the sample extract binds to the antibodies, and is then detected by addition of enzyme (horseradish peroxidase) labeled Cry1F antibody. After a simple wash step, the results of the assay are visualized with a color development step; color development is proportional to Cry1F concentration in the sample extract.

*Lighter color = Lower concentration*

*Darker color = Higher concentration*

Materials Provided:	Materials Not Provided:
<ul style="list-style-type: none"><li>- 1 x Antibody –coated solid plate</li><li>- 1 x Vial Cry1F Positive Control</li><li>- 1 x Bottle of Cry1F Enzyme Conjugate</li><li>- 1 x Packet of Wash Buffer Salts</li><li>- 1 x Bottle of Substrate</li><li>- 1 x Bottle of Stop Solution</li></ul>	<ul style="list-style-type: none"><li>- Distilled Or Deionized Water for preparing wash buffer.</li><li>- Glass Bottles or flasks plus graduated cylinder with one liter capacity for preparation and storage of Wash and Extraction Buffer.</li><li>- Tween-20 (Sigma P-1379, or Equivalent) for preparation of Extraction Buffer.</li><li>- Test Or Centrifuge Tubes for extraction of grain and dilution of sample extracts (optional).</li><li>- Waring laboratory blender (model 31BL91 or equivalent) for Preparation of Extraction Buffer.</li><li>- Snap-cap Tubes and pestles for extraction of leaf samples (EnviroLogix Cat# ACC 002, 100/package), optional.</li><li>- Centrifuge capable of 5000 x g, (optional).</li><li>- Disposable Tip, Adjustable Air-Displacement Pipettes which will measure 100 microliters (µL).</li><li>- Marking Pen (indelible).</li><li>- Tape or Parafilm.</li><li>- Timer.</li><li>- Microtiter Plate Reader or strip reader.</li><li>- Wash Bottle, or microtiter plate or strip washer.</li><li>- Multi-Channel Pipette that will measure 100 µL (optional).</li><li>- Racked Dilution Tubes for loading samples into the plate with a multichannel pipette (optional).</li><li>- Orbital Plate Shaker (optional).</li></ul>

**Kit Specifications:**

Format:	- 96 Wells.
Time Requirement:	- 2 h 30 min. - Rapid Protocol: 1 h 30 min.
Detection Limit:	- High Sensitivity Protocol: 0.25 % Herculex™ I corn.
Measurement:	- Plate Reader 450 nm.
Product ID #:	- AP016.