

# ENVIROLOGIX Inc. - GMO Monitoring Kits

## Cry9C - PLATE KIT (ELISA Kit)

### ● Intended use

The Envirologix Quantiplate Cry9C Kit is designed for the quantitative or qualitative laboratory detection of Cry9C endotoxin in corn grain or seed. The most prevalent Cry9C varieties in corn are Starlink™ and Starlink licensees. For ease of reference only, corn modified with Cry9C is referred to throughout this product insert as Starlink. Two assay protocols are presented: high sensitivity and rapid protocols. Please see the application guides in the product insert for instructions on use of this kit with corn leaves, single corn seeds, corn flour, cornmeal, and corn grits.

### ● General

The EnviroLogix QuantiPlate™ Cry9C 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 Cry9C toxin. Any residues present in the sample extract bind to the antibodies, and are then detected by addition of enzyme (horseradish peroxidase) labeled Cry9C antibody. After a simple wash step, the results of the assay are visualized with a color development step; color development is proportional to Cry9C 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>- 12 x Strips Of 8 Antibody-Coated Wells each, in plate frame.</li><li>- 1 x Vial Of Cry9C Negative Control.</li><li>- 1 x Vial Of 0.01% StarLink (0.2 ppb Cry9C) Calibrator.</li><li>- 1 x Vial Of 0.04% StarLink (0.8 ppb Cry9C) Calibrator.</li><li>- 1 x Vial Of 0.125% StarLink (2.5 ppb Cry9C) Calibrator.</li><li>- 1 x Vial Of 0.25% StarLink (5 ppb Cry9C) Calibrator.</li><li>- 1 x Bottle Of Cry9C-Enzyme Conjugate.</li><li>- 1 x Bottle 20x Grain Extraction Concentrate.</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 and diluting 20x grain extraction concentrate.</li><li>- Glass Bottles or flasks with 1.2 litre capacity for preparation of 1x Grain Extraction Solution and 1 liter capacity for preparation of Wash Buffer, plus graduated cylinders for measuring the components of these solutions.</li><li>- Test Or Centrifuge Tubes for extraction of grain and dilution of sample extracts (optional).</li><li>- Centrifuge capable of 5000 x g, or low protein-binding hydrophilic syringe filters, 0.45 um (such as Pall Gelman Sciences – Product no. 4184) (optional).</li><li>- Disposable Tip, Adjustable Air-Displacement Pipettes which will measure 100 and 1000 micro liters (µL) and 5 ml.</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:	- Rapid Protocol: 2 h 15 min. - High Sensitivity Protocol: 3 h 45 min.

Detection Limit:	- Rapid Protocol: 0.250 ppb. - High Sensitivity Protocol: 0.070 ppb.
Limit of Quantification:	- Rapid Protocol: 6 ppb. - High Sensitivity Protocol: 1.5 ppb.
Cross-Reaction: (Limit of Detection)	- Cry9C (0.070 ppb). - Cry1Ab (>50,000 ppb). - Cry1Ac (>50,000 ppb). - Cry2A (>50 000 ppb). - Cry1F (66 ppb). - Cry1C (>50,000 ppb).
Measurement:	- Plate Reader 450 nm.
Product ID #:	- AP008.