

# ENVIROLOGIX Inc. – GMO Monitoring Kits

## LIBERTY LINK<sup>®</sup> Pat/*bar* Plate Kit (ELISA Kit)

### ● Intended use

The Envirologix Libertylink<sup>®</sup> PAT/*Bar* Plate Kit Is Designed For The Qualitative Laboratory Detection Of Phosphinothricin Acetyl Transferase Enzyme (PAT) Coded For By The *Bar* Gene In Grain, Leaf, Or Seed. Two Assay Protocols Are Presented: The High Sensitivity Protocol Will Detect The PAT Enzyme From The *Bar* Gene (PAT/*Bar*) Found In 0.1% Starlink Corn (By Weight) And Requires 2.5 Hours To Run. The Rapid Protocol (One Hour Total) Is Intended For Use In Screening Individual Seeds Or Leaf Samples For The Presence Of PAT/*Bar*. Libertylink PAT From The *Pat* Gene, At Concentrations Present In T25 Corn, Is Not Detected In Either Format.

### ● General

The EnviroLogix LibertyLink<sup>®</sup> PAT/*bar* Plate Kit is a “sandwich” Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, **corn** or **cotton** sample extracts are added to test wells coated with antibodies raised against PAT from the *bar* gene. Any PAT/*bar* present in the sample extract binds to the antibodies, and is then detected by addition of enzyme (horseradish peroxidase).labeled PAT/*bar* antibody. After a simple wash step, the results of the assay are visualized with a color development step; color development is proportional to PAT/*bar* concentration in the sample extract.

*Lighter color = Lower concentration*

*Darker color = Higher concentration*

Materials Provided:	Materials Not Provided But Required:
<ul style="list-style-type: none"> <li>- 1 x Antibody-Coated Solid Plate.</li> <li>- 1 x Bottle Of PAT/<i>bar</i>-Enzyme Conjugate.</li> <li>- 1 x Packet Of Wash/Extraction 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/Extraction Buffer.</li> <li>- Glass Bottles or flask plus graduated cylinder with 1 liter capacity for preparation and storage of Wash/Extraction Buffer.</li> <li>- Test Or Centrifuge Tubes for extraction of grain.</li> <li>- Snap-Cap Tubes And Pestles for extraction of leaf samples (EnviroLogix Cat# ACC 002, 100/package).</li> <li>- Centrifuge capable of 5000 x g.</li> <li>- Disposable Tip, Adjustable Air Displacement Pipettes which will measure 50 and 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 50 and 100 mL (optional).</li> <li>- Racked Dilution Tubes for loading samples into the plate with a multi-channel pipette (optional).</li> <li>- Orbital Plate Shaker (optional).</li> </ul>

### Kit Specifications:

Format:	- Antibody-Coated Solid Plate.
Time Requirement:	- High Sensitivity Protocol: 2.5 h. - Rapid Protocol: 1 h.
Detection Limit:	- High Sensitivity Protocol: 0.1% Starlink Corn Grain. - Rapid Protocol: qualitative (yes/no).
Measurement:	- Microtiter Plate Reader or strip reader.

Product ID #:

- AP013.