

ENVIROLOGIX Inc. - GMO Monitoring Kits

LIBERTY LINK[®] Pat/pat Plate Kit (ELISA Kit)

● Intended use

The Envirologix Libertylink[®] PAT/Pat Plate Kit Is Designed For The Qualitative Laboratory Detection Of Phosphinothricin Acetyl Transferase Enzyme (PAT) Coded For By The *Pat* Gene In Grain, Leaf, Or Seed. Two Assay Protocols Are Presented. The High Sensitivity Protocol Will Detect The PAT Enzyme From The *Pat* Gene (PAT/Pat) Found In 0.2% T25 Corn And 3% Bt11 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/Pat. Libertylink PAT From The *Bar* Gene, At Concentrations Present In Starlink[®] Corn, Is Not Detected In Either Format.

● General

The EnviroLogix LibertyLink[®] PAT/pat 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 *pat* gene. Any residues present in the sample extract bind to the antibodies, and are then detected by addition of enzyme (horseradish peroxidase) labeled PAT/pat antibody. After a simple wash step, the results of the assay are visualized with a color development step; color development is proportional to PAT/pat concentration in the sample extract.

Lighter color = Lower concentration

Darker color = Higher concentration

Materials Provided:	Materials Not Provided:
<ul style="list-style-type: none"> - 1 x Antibody-Coated Solid Plate. - 1 x Bottle Of Enzyme Conjugate. - 1 x Packet Of Wash/Extraction Buffer Salts. - 1 x Bottle Of Substrate. - 1 x Bottle Of Stop Solution. 	<ul style="list-style-type: none"> - Distilled Or Deionized water for preparing Wash/Extraction Buffer. - Glass Bottles or flask plus graduated cylinder with 1 liter capacity for preparation and storage of Wash/Extraction Buffer. - Test or centrifuge tubes for extraction of grain. - Snap-Cap Tubes and pestles for extraction of leaf samples (EnviroLogix Cat# ACC 002, 100/package). - Centrifuge capable of 5000 x g. - Disposable Tip, Adjustable Air-Displacement Pipettes which will measure 50 and 100 microliters (µL). - Marking Pen (indelible). - Tape or Parafilm. - Timer. - Microtiter Plate Reader or strip reader. - Wash Bottle, or microtiter plate or strip washer. - Multi-Channel Pipette that will measure 50 and 100 mL (optional). - Racked Dilution Tubes for loading samples into the plate with a multichannel pipette (optional). - Orbital Plate Shaker (optional).

Kit Specifications:

Format:	- Antibody-Coated Solid Plate.
Time Requirement:	- High Sensitivity Protocol: 3 h 15 min. - Rapid Protocol: 1 h 45 min.
Detection Limit:	- High Sensitivity: 0.2%. - Rapid Protocol: Qualitative (yes/no).

Measurement:
Product ID #:

- Microtiter Plate Reader.
- AP014.