

ENVIROLOGIX Inc. - GMO Monitoring Kits

ROUNDUP READY® SOYBEAN & SOY FLOUR QuantiPlate™

● Intended use

The Envirologix Quantiplate Kit For Roundup Ready Soybean And Soy Flour Is A 96 Well Plate Kit Designed For The Qualitative Or Quantitative Laboratory Detection Of CP4 EPSPS Enzyme (CP4) Coded For By The Roundup Ready Gene In Soybean Grain Or Flour. This One-Hour Test Will Detect The CP4 Enzyme Found In 0.1% Roundup Ready (RR) Soy Grain Or Flour, And Requires 1 Hour To Run.

● General

This kit is a “sandwich” Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, soy grain or flour sample extracts are added to test wells coated with antibodies raised against CP4. Any CP4 present in the sample extract binds to the antibodies and is then detected by addition of enzyme (horseradish peroxidase) labeled CP4 antibody. After a simple wash step, the results of the assay are visualized with a color development step. Color development increases with increasing CP4 sample concentration from 0.1% to 2% RR soy, then levels and drops off.

Lighter color = Low concentration

Darker color = High concentration

The EnviroLogix Plate kit for Roundup Ready Soy is calibrated with 0, 0.1%, 1% and 2% RR soy powder standards, sourced from the IRMM-JRC. Samples are either quantitated by graphing the calibrator concentration vs. absorbance on a linear scale, or judged to contain more or less CP4 enzyme than each standard by comparing sample absorbances to the absorbances of the sample extracts. Small quantities of soy standard are supplied with the test kit. Additional quantities are available directly from JRC.

| Materials Provided: | Materials Not Provided: |
|---|---|
| <ul style="list-style-type: none">- 12 x Strips Of 8 Antibody-Coated Wells each, in plate frame.- 1 x Vial of RR Negative Control Soy Flour (0.2 grams).- 1 x Vial of 0.1% RR Soy Powder Standard (0.2 grams).- 1 x Vial of 1% RR Soy Powder Standard (0.2 grams).- 1 x Vial of 2% RR Soy Powder Standard (0.2 grams).- 1 x Bottle of CP4-Enzyme Conjugate.- 1 x Packet of Wash Buffer Salts.- 1 x Bottle of Substrate.- 1 x Bottle of Stop Solution. | <ul style="list-style-type: none">- Disposable Tip, Adjustable Air-Displacement Pipette to deliver 50, 100, and 1000 microliters.- 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 Buffer.- Test Or Centrifuge Tubes for extraction of grain and dilution of sample extracts.- Centrifuge capable of 5000 x g.- Twelve Channel Pipette to deliver 50 µL and 100 µL (optional).- Marking Pen (indelible).- Tape or Parafilm.- Timer.- Microtiter Plate Reader or strip reader.- Wash Bottle, or microtiter plate or strip washer.- Racked Dilution Tubes for loading samples into the plate with a 12-channel pipette (optional).- Orbital Plate Shaker (optional). |

Kit Specifications:

| | |
|-------------------|--|
| Format: | - 96 Well. |
| Time Requirement: | - 1 h. |
| Detection Limit: | - 0.1% Roundup Ready soy in grain and flour. |
| Measurement: | - Microtiter plate reader. |
| Product ID: | - AP032. |