Genetically Modified Organisms

Reveal®

For CP4 (Roundup Ready®)



Intended Use

Reveal for CP4 is an immunochromatographic lateral flow assay used for the qualitative analysis of CP4 in soybeans and corn. The test can detect as little as 1 CP4 enhanced soybean among 1,000 beans (0.1%), and 1 NK603 Roundup Ready kernel of corn among 800 kernels (0.125%). Earlier Roundup Ready corn varieties, such as GA21, will not be detected.

The Test

Reveal for CP4 is a single-step lateral flow immunochromatographic assay. The water extract is wicked through a reagent zone, which contains antibodies specific for the CP4 EPSPS protein (CP4), conjugated to colored particles. If CP4 is present, it will be captured by the conjugated antibodies. The CP4-antibody-particle complex is then wicked onto a membrane which contains a zone of antibody specific for CP4. This zone captures the complex, allowing the particles to concentrate and form a visible line. If no CP4 is present, no line will form. The membrane also contains a control zone where an immune complex present in the reagent zone is captured by an antibody, forming a visible line. The control line will always form regardless of the presence of CP4, ensuring the strip is working properly. Positive test results can be read in as little as 5 minutes.

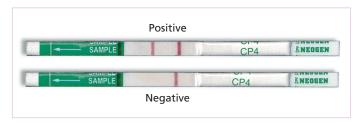
Procedure

Samples must be extracted prior to testing.

- 1. Blend sample for 30-45 seconds in a Mason-type jar (sample size varies by commodity type and size).
- 2. Add water to the jar and shake for 30-45 seconds (volume of water used varies by commodity type).
- 3. Using a transfer pipette, transfer 0.5 mL from the jar to a sample tube.
- 4. Place a clean strip into the sample tube.
- 5. Interpret results within 10 minutes. If 2 lines appear, the sample is positive. If 1 line appears, the sample is negative.

See package insert for complete instructions

Results



Product Specifications

Sensitivity: Soybeans: 1 in 1,000 beans (0.1%)

Corn: 1 in 800 kernels (0.125%)

Testing time: 5-10 minutes

Storage: Room temperature (18-30°C)

Tests per kit: Up to 50

Materials Recommended But Not Provided

Available from Neogen*

- 1. Scale capable of weighing 300 grams
- 2. Times
- 3. Reveal centrifuge tube rack

Not available from Neogen

- 1. 32 oz Mason-type (glass or plastic) jars
- 2. Blender blade assembly for use with 32 oz jars
- 3. Waterproof marker
- 4. Graduated cylinder
- 5. Distilled, deionized or tap water

Ordering Information

Prod.# Product description

8005 Reveal for CP4 - screens 50 samples

9590 Reveal AccuScan III Reader