

Deoxynivalenol (Vomitoxin) Rapid Test

1. INTENDED USE

Deoxynivalenol Rapid Test is a competitive immunoassay for the semi-quantitative detection of the presence of Deoxynivalenol residue in grains and feed sample.

Cut-off: 200 ppb base

Assay Time: 5 - 10 min

Sample: Grains and feed extraction

2. PRINCIPLE OF THE ASSAY

Deoxynivalenol Rapid Test is based on competitive lateral flow immunochromatographic assay. The DON conjugate in the test zone will capture the immuno-gold (colloid gold-DON antibody conjugate), when there is very little dissociative DON in the extraction. A visible red test band indicates a negative result when the control band (C zone) shows that the card is valid. The test band (T zone) will be not visible if DON is present in concentration of the cut-off value and above which explains a positive result.

3. KIT COMPONENT

- 10×foil pouches each contains one DON cassette with a pipette and a desiccant
- 1×concentrated assay diluent (20×, 8 mL)
- 2×centrifugal tube (15 mL)
- 10×centrifugal tube (1.5 mL)
- Products Manual

4. TEST PROCEDURE

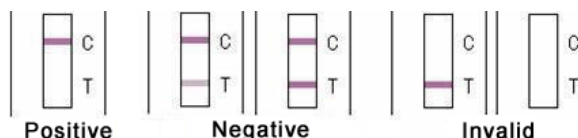
- Assay diluent preparation: dilute 20× concentrate with distilled water (i.e. 1 mL + 19 mL). In case of precipitates, bring the diluents to room temperature and mix well into solution.
 - Grind a representative sample to the particle size of fine instant coffee (50% passes through a 20 mesh screen). Weigh out 1.0 g ground portion of the sample into the centrifugal tube (15 mL).
 - Add assay diluent into the tube and cover the lid. Shake for 5 min and do a centrifugation at 4000 rpm for 1 min to get supernatant.
- NOTE: Please refer to below table for the amount of applied assay diluent. (REF: Table)

Cut-off (ppb)	200	500	1000
Assay Diluents (mL)	2.0	5.0	10.0

- Transfer 0.2 mL of supernatant into a 1.5 mL centrifugal tube. Add 0.8 mL of assay diluent into the tube and mix well. Use the mixture for the assay.
- Take out the cassette from the foil pouch and place it horizontally.

- Suck the liquid and drop 3 drops into the assay sample hole "S".
- Interpret the result in 5-10 minutes. Result after 10 minutes is considered as invalid.

5. INTERPRETATION OF RESULTS



Positive: Only one clear band in C zone indicates a positive result. Positive shows that the concentration of Deoxynivalenol is at or above 200 ppb in the samples.

Negative: The presence of both bands in C zone and T zone.

Invalid: No band appears in C zone.

6. STORAGE

The kit can be stored at room temperature (2-30°C). The test kit is stable through the expiration date (18 months) marked on the foil pouch. **DO NOT FREEZE.** Do not store the test kit in direct sunlight.

7. PRECAUTIONS

- For best results, please strictly adhere to these instructions.
- All reagents must be at room temperature before running the assay.
- Do not remove test cassette from its pouch until immediately before use.
- Do not reuse the test kit.
- Do not use the test beyond its expiration date marked on the foil pouch.
- The components in this kit have been quality control tested as standard batch unit. Do not mix components from different lot numbers.

8. LIMITATION

Deoxynivalenol Rapid Test is an useful tool offering a rapid and accurate testing in field screening, exceeding with its convenience. It provides a semi-quantitative method to detect the Deoxynivalenol above 200 ppb in grains or feed samples. If you want a quantitative result, please adopt other method such as ELISA/ HPLC in practice.