

Zearalenone (ZEN) Quantitative Rapid Test Strip

Product Code: CUS-GS17A-N

1. Introduction

The Zearalenone (ZEN) Quantitative Rapid Test Strip is used for onsite testing as it is convenient to use, provides rapid results and high sensitivity. Antigen is fixed on nitrocellulose membrane test area, which is called T. Secondary antibody is fixed on control area, which is named C. Antibody conjugated with gold nanoparticles is fixed in microwell. You can get quantitative detection results by using it with the quantitative mycotoxin analyzer. It is suitable to detect ZEN in cereals, some feed and feedstuff. Use with the analyzer gives accurate quantitative repeatable results for record keeping.

2. Detection Range

0-1500ppb

3. Kit Contains

Product Name	QTY
Quantitative Rapid Test Strip	96 Tests (8pcs/ vial, 12 vials)
Microwell	96 Tests (8pcs/ vial, 12 vials)
40% Ethanol	2400mL
Sample Diluent	50mL × 2 bottles
Reagent A	5mL × 1 bottle
Reagent B	5mL × 1 bottle
ID Card	1pcs
Manual	1pcs

4. Required For Test But Not In Kit

- Mycotoxin LFD Analyzer – **Part # CUS-GS101**
- Mycotoxin LFD Incubator– **Part # CUSFY-1**
- Pipettor (20-200uL) – **Part # MBP5200-200U**
- Pipettor (100-1000uL) – **Part # MBP5200-1M**
- Tips 200uL – **Part # MB-P4300-RK**
- Tips 1000uL – **Part # CE-PTBP-1000**
- Centrifuge Tube 50ml – **Part #MBC2603-B**
- 50mL Graduated Cylinder – **Part # SC-55303**
- Pulverizer – **Part # CUS-CG-7120**
- Centrifuge – **Part # CUS-D1008E**
- Timer – **Part # TMW1**

5. Application

It is suitable to detect ZEN in cereals, some feed and feedstuff. Contact Scigiene regarding other materials.

6. Storage and Expiry Date

Store at 2-8°C.

Expiry Date is one year.



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7. Preparation before Test

1) Sample Preparation

40% Ethanol: Add 40mL absolute ethyl alcohol into 60mL distilled water and mix well.

2) Product Preparation

Equilibrate appropriate Quantitative Rapid Strip and Sample Diluents at room temperature. If you do not need to use 8 microwells, put back the rest and cover and seal well.

3) Incubator Preparation

Set at 42°C and lay down cover. Then incubate at steady 42°C for 10mins at least.

4) Handheld Analyzer Preparation

Start Analyzer for 5mins; Make sure Card Deck is well set; Insert ID card into Analyzer; Click "System Setup" and select "Assay Item Management", at last click "Import".

8. Sample Preparation

8.1) Add 100g representative sample and then pulverize it and later pass through 20mesh sieve.

8.2) Add 5g screened sample into 50mL centrifuge tube. Add 25mL 40% ethanol and then shake it rigorously for over two mins.

8.3) Centrifuge at 3500r/min for five mins.

8.4) Dilution:

A. Cereals like corn, wheat etc

Add 25uL supernatant then add 975uL Sample Diluent. Mix well.

B. Feed and By-product

Add 1mL supernatant then add 15uL Reagent A. Mix Well and then add 15uL Reagent B. Mix Well.

Centrifuge at 3500r/min for thirty seconds.

Add 25uL supernatant then add 975uL Sample Diluent. Mix Well.

C. Soybean Meal

Add 1mL supernatant then add 50uL Reagent A. Mix Well and then add 50uL Reagent B. Mix Well.

Centrifuge at 3500r/min for thirty seconds.

Add 25uL supernatant then add 975uL Sample Diluent. Mix Well.

P.S: If the test result beyond curve range, you would need to test sample again. Then you can dilute supernatant from step 6.3 with 40% ethanol 3X fold. Then process step 6.4. Result=Test Result *3.

9. Key Notes

Do not use test strip, microwell and Sample Diluent from other batches.

Load too much or too little sample and it will influence result.

Do not touch test strip display area (T/C Line). Avoid direct sunlight or direct air flow from fan.

It is disposable. Do not use it again.

10. Test Procedure

1) Pull transverse baffle of Incubator to outermost position. Put required microwell on hole of incubator, and then put corresponding test strip on guide slot of incubator (please refer to Chart

1). (Better test ≤ 4 strips at one time)

2) Before adding the sample, turn the test solution upside down to mix well. Transfer 100uL of test solution into microwell. Slowly add and then extrude solution over five times to mix well. Lay down Incubator Cover.

3) Push transverse baffle to let test strip fall into microwell to start reaction.

4) Take out test strip after reaction of three mins. Discard sample pad.

5) Place the color development area of the test strip upward, the end of the sample pad facing in, and then the coloration end is facing outward, and insert test strip into card deck. Click "Quick Test" and get results.

6) After finishing test, put the unused test strips and microwells back to vials and ensure they are well-sealed. Fasten the bottle of the remaining sample diluent and put it back into the kit, and store at 2-8°C.

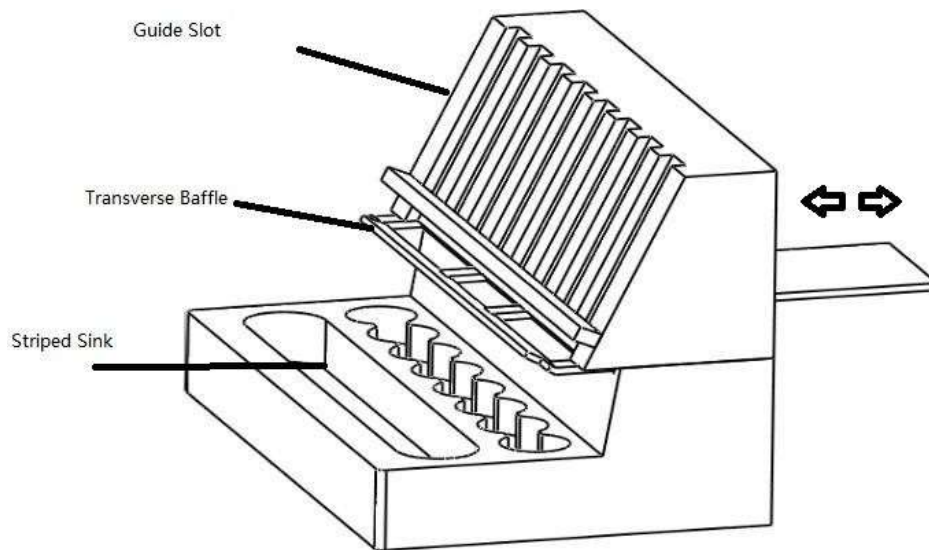


Chart 1: Incubator



Quantitative Mycotoxin Analyzer



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