

Manual of Zearalenone (ZEN) Lateral Flow Test Strip

1. Product Code: WSK-G17C

2. Summary

This product is widely used for on-site test on a large scale, because it is convenient to use, rapid to get result 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 microvoid.

T line is not colorful or its darkness is lighter than C line, when ZEN content in sample is above limit of detection, then result is positive; T line appears amaranth or its darkness is similar or darker than C line, when ZEN content in sample is below limit of detection, then result is negative.

3. Detection range

50-1000ppb (ug/kg)

4. Application

It is suitable to detect ZEN in cereals、 some feedstuff and finished feed.

5. Product Composition

Product Name	QTY	Remark
Lateral Flow Test Strip	8pcs/ section, 12 sections	-
Microvoid in which antibody conjugated with gold nanoparticles is fixed	8pcs/section, 12 sections	-
Sample Diluent	4bottles	50mL/bottle
Manual	1pcs	-

6. Storage

Store at 2-8°C.

7. Expiry Date

Expiry Date is 1 year.

Manufacture Date refers to information on package.

Take out Lateral Flow Test Strip and Sample Diluent and do not open them until they reach at room temperature. If you do not need to use 8microvoid once at a time, then put back the rest and cover and seal well.

8. Preparation before Test

1) Solution Preparation

70% Methyl Alcohol: Add 70mL methyl alcohol into 30mL pure water or distilled water and mix well (The volume can be scaled up in proportion).

2) Product Preparation

Take out required Lateral Flow Test Strip and sample diluent, wait until they reach at room temperature.

9. Sample Pretreatment

- 1) Take 5g pulverized sample and then add 15mL 70% methyl alcohol.
- 2) Vibrate for 5minutes, then centrifuge at 4000r/min for 5minutes or filter by filter paper.
- 3) Detection Range: 50-200ppb

Take 50uL supernatant and add suitable amount of sample diluent according to detection range as listed below. Mix well.

Detection Range: 400-1000ppb

Take 50uL supernatant and add 450uL sample diluent. Mix well. Then take 50uL mixed solution and add suitable amount of sample diluent according to detection range as listed below. Mix well.

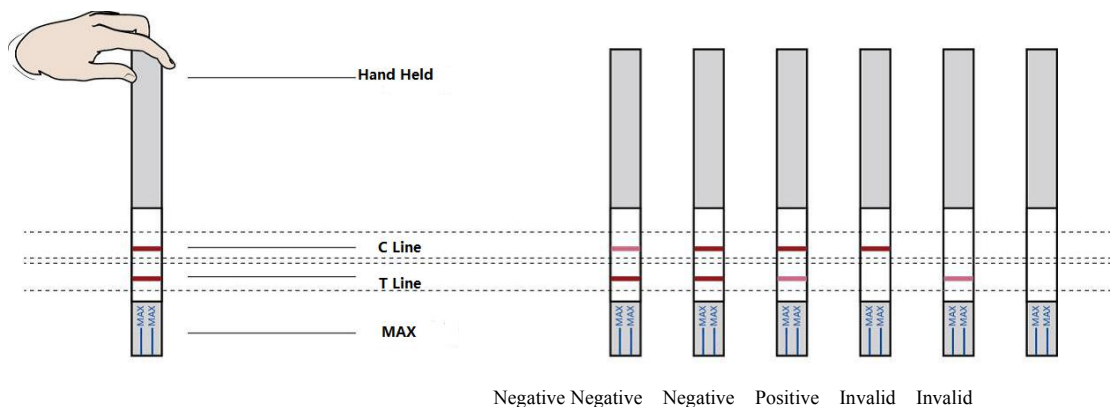
Detection Range (ppb)	50	100	200	400	500	1000
Amount of Sample	400	850	1750	300	450	900
Diluent (uL)						

P.S: Add corresponding times of sample extracting solution for different amount of sample.

10. Test Procedure

- 1) After microvoid staying at room temperature, add 150uL solution prepared at 9.3 into microvoid. Slowly blow for mixing well. Then wait for reaction for 3minutes (Prolong reaction time to 10minutes if reaction temperature is too low).
- 2) Put the end of strip which tagged Max in microvoid.
- 3) After reaction of 5minutes, get result. Result is invalid after 10minutes.

11. Result Analysis



Negative (-): T line and C line are colorful, which means ZEN content in sample is below limit of detection.

Positive (+): T line is not colorful and C line is colorful, which means ZEN content in sample is above or equal to limit of detection.

Invalid Result: C line is not colorful or both lines (T&C) are not colorful, which means incorrect cooperation or invalid test strip. Please read the manual again and test with new test strip.

12. Note

- 12.1 Do not use test strip, microvoid and Sample Diluent from other batches.
- 12.2 Please strictly operate according to manual. Load too much or too few sample will influence result.



- 12.3 Do not touch test strip display area. Avoid direct sunlight or direct blow from fan.
- 12.4 It is useless to use water or other liquid as negative sample test control.
- 12.5 This product is disposable. Do not use it again.
- 12.6 Please ask for replacement if you found product damaged or contaminated or expired useful life when you receive product.
- 12.7 Please note test result of this product is for reference only.