



# **BIOEASY MYCOTOXIN** RESIDUE SCREENING

BIOEASY USA, INC. Shenzhen Bioeasy Biotechnology Co., Ltd. www.bioeasy.com | Toll Free: 400-111-1126







www.bioeasy.com



## YOUR FOOD SAFETY CONCERN, OUR DEDICATION

Mycotoxins are naturally occurring toxins produced by certain molds (fungi) and can be found in a variety of food commodities. They can cause a number of adverse health effects and pose a serious health threat to both humans and livestock and has been one of the biggest challenges for the global food industry in aspects like food security and nutrition. Mycotoxins such as aflatoxin, zearalenone, ochratoxin, fumonisin and vomitoxin have caused millions of damages to the global market.

Bioeasy offers high quality test kits to screen your commodities to minimize the risk of discarding the product and eventually improve the cost efficiency. It's also a very important step to fight against mycotoxin contamination.

Working as a partner with farmers and processors all over the world, Bioeasy has kept pace with the global testing requirements of the industry to ensure that crops and feed products are among the world's safest food.

#### We offer a complete mycotoxin testing program:

- Wide range of products to the market covering nearly every kind of the mycotoxin.
- Rapid tests available to meet FDA standards.
- A complete line of incubators and readers.
- Positive and negative controls for quality insurance of testing procedures.



# MYCOTOXIN QUANTITATIVE RAPID TEST

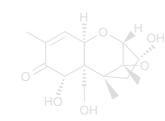
#### Product category

Art. No.	Product	Spec.	Application	Linear Range	Test Time
YR1F001D-1	Deoxynivaleno Quantitative Test Kit for Cereals	48T	Cereals	200-3500ppb	3+3 min
YR1F001D-2	Deoxynivaleno Quantitative Test Kit for Cereals and Feed	48T	Cereals Feed	200-8000ppb	3+4 min
YR1F002D-1	Aflatoxin B1 Quantitative Rapid Test Kit for Cereals and Feed	48T	Cereals Feed	2-50ppb	3+4 min
YR1F002D-2	Aflatoxin B1 Quantitative Rapid Test Kit for Cereals and Feed	48T	Cereals Feed	2-70ppb	3+4 min
YR1F003D-1	Zearalenone Quantitative Test Kit for Cereals and Feed	48T	Cereals Feed	30-1500ppb	3+4 min
YR1F003D-2	Zearalenone Quantitative Test Kit for Cereals and Feed	48T	Cereals Feed	60-1000ppb	3+4 min
YR1F004D-1	Ochratoxin A Quantitative Test Kit for Cereals	48T	Cereals	2-50ppb	3+4 min
YR1F004D-2	Ochratoxin A Quantitative Test Kit for Cereals and Feed	48T	Cereals Feed	30-400ppb	3+4 min



\*The information is for reference purpose only, please in kind prevail.

## DEOXYNIVALENOL **QUANTITATIVE RAPID TEST KIT**



#### DEOXYNIVALENOL (DON)

Deoxynivalenol (DON) is one of several mycotoxins produced by certain Fusarium species that frequently infect corn, wheat, oats, barley, rice, and other grains in the field or during storage. The exposure risk to human is directly through foods of plant origin (cereal grains) or indirectly through foods of animal origin (kidney, liver, milk, eggs). It has been detected in buckwheat, popcorn, sorgum, triticale, and other food products including flour, bread, breakfast cereals, noodles, infant foods, pancakes, malt and beer. DON affects animal and human health causing acute temporary nausea, vomiting, diarrhea, abdominal pain, headache,



#### Advantages

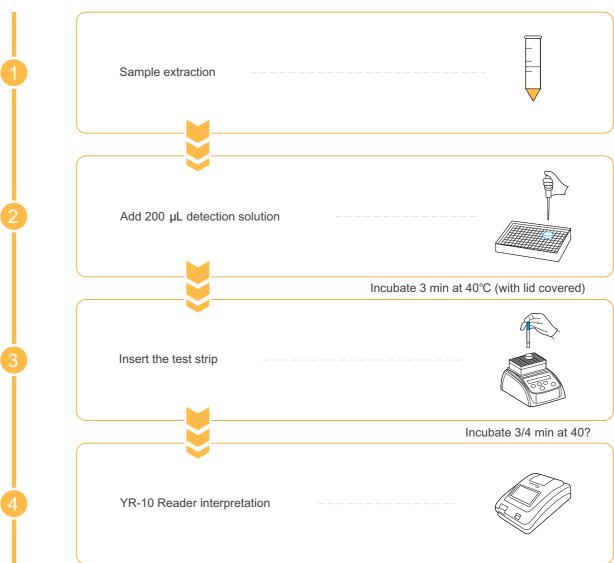
Rapid : Result in 6 or 7 min Sensitive : Comply with different MRL requirements Quantitative : Able to determine DON concentration Simple : Easier sample preparation Accurate and reliable Cost Effective



### SPECIFICATION

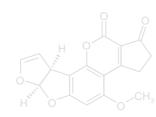
		Spec.	Applica- tion	Linear Range		Note
YR1F001D-1	Deoxynivalenol Quantitative Test Kit for Cereals	48T	Cereals	200-3500ppb	3+3 min	Water extraction
YR1F001D-2	Deoxynivalenol Quantitative Test Kit for Cereals and Feed	48T	Cereals, Feed	200-8000ppb	3+4 min	Ethanol extraction

#### **Test Procedure**





## **AFLATOXIN B1 QUANTITATIVE RAPID TEST KIT**



#### **AFLATOXIN B1**

Aflatoxin B1 is a common contaminant in a variety of foods including peanuts, cottonseed meal, corn, and other grains as well as animal feeds. Aflatoxin B1 is considered the most toxic Aflatoxin and it is highly implicated in hepatocellular carcinoma (HCC) in humans. In animals, Aflatoxin B1 has also been shown to be mutagenic, teratogenic, and to cause immunosuppression.



#### Advantages

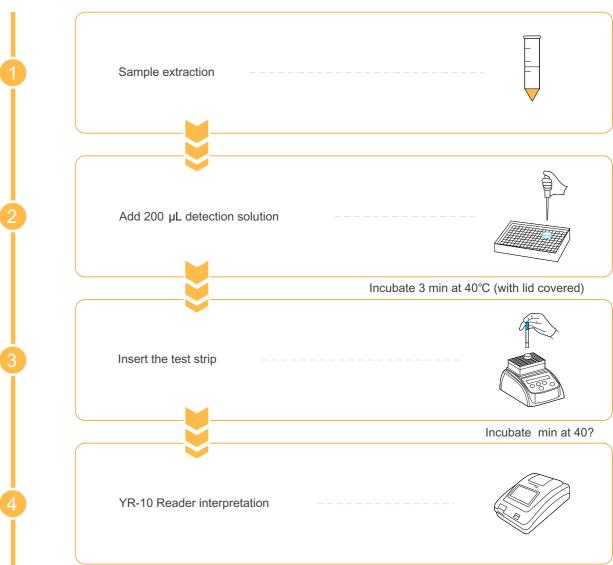
Rapid: Result in 7 min Sensitive: Comply with different MRL requirements Quantitative: Able to determine AFB1 concentration Simple: Easier sample preparation Accurate and reliable Cost Effective



### SPECIFICATION

		Spec.	Applica- tion	Linear Range		Note
YR1F002D-1	Aflatoxin B1 Quantitative Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	2-50ppb	3+4 min	Ethanol extraction
YR1F002D-2	Aflatoxin B1 Quantitative Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	2-70ppb	3+4 min	Ethanol extraction

#### **Test Procedure**

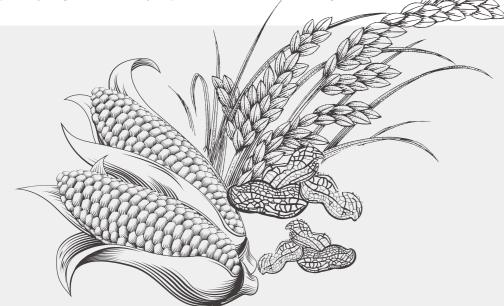




## ZEARALENONE **QUANTITATIVE RAPID TEST KIT**

#### ZEARALENONE (ZEN)

Zearalenone (ZEN), also known as RAL and F-2 mycotoxin, is a potent estrogenic metabolite produced by some Fusarium and Gibberella species. Zearalenone is heat-stable and is found worldwide in a number of cereal crops, such as maize, barley, oats, wheat, rice, and sorghum. The human and livestock exposure to ZEN through the diet poses health concern due to the onset of several sexual disorders and alterations in the development of sexual apparatus. There are reliable case reports of early puberty in girls chronically exposed to ZEN in various regions of the world



#### Advantages

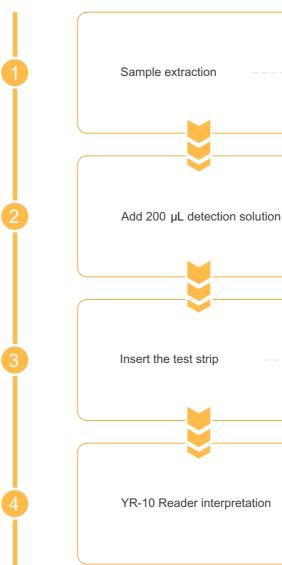
Rapid: Result in 7 min Sensitive: Comply with different MRL requirements Quantitative: Able to determine ZEN concentration Simple: Easier sample preparation Accurate and reliable Cost Effective



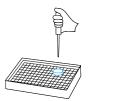
## **SPECIFICATION** -

		Spec.	Applica- tion	Linear Range		Note
YR1F003D-1	Zearalenone Quantitative Test Kit for Cereals and Feed	48T	Cereals, Feed	30-1500ppb	3+4 min	Ethanol extraction
YR1F003D-2	Zearalenone Quantitative Test Kit for Cereals and Feed	48T	Cereals, Feed	60-1000ppb	3+4 min	Ethanol extraction

#### **Test Procedure**







#### Incubate 3 min at 40°C (with lid covered)



#### Incubate 4 min at 40?



## OCHRATOXIN A **QUANTITATIVE RAPID TEST KIT**

#### OCHRATOXIN A (OTA)

A toxin produced by different Aspergillus and Penicillium species — is one of the most-abundant food-contaminating mycotoxins. Human exposure can occur through consumption of contaminated food products, particularly contaminated grain and pork products, as well as coffee, wine grapes, and dried grapes. The toxin has been found in the tissues and organs of animals, including human blood and breast milk.



#### Advantages

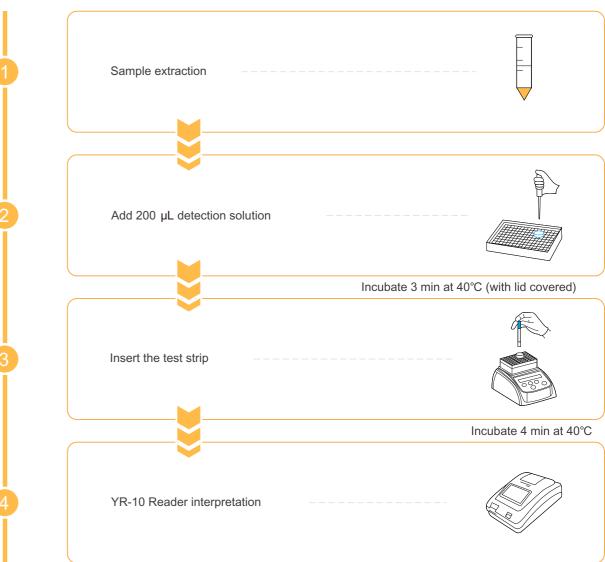
Rapid: Result in 7 min Sensitive: Comply with different MRL requirements Quantitative: Able to determine OTA concentration Simple: Easier sample preparation Accurate and reliable Cost Effective



### SPECIFICATION -

Art. No.	Product	Spec.	Applica- tion	Linear Range	Test Time	Note
YR1F004D-1	Ochratoxin A Quantitative Test Kit for Cereals	48T	Cereals	2-50ppb	3+4 min	Ethanol extraction
YR1F004D-2	Ochratoxin A Quantitative Test Kit for Cereals and Feed	48T	Cereals, Feed	30-400ppb	3+4 min	Ethanol extraction
Shelf life: 12 months	Storage: at 2~30?					

#### Test Procedure







# MYCOTOXIN **QUALITATIVE RAPID TEST**

#### Product category

Art. No.	Product	Spec.	Application	LOD	Test Time
YRF1011-2	Deoxynivalenol Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	400-500ppb 800-1000ppb 2500-3000ppb 4500-5000ppb	3+3 min
YRF1001-2	Total Aflatoxin Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	3-5ppb 8-10ppb 15-20ppb 45-50ppb	3+3 min
YRF1003-3	Zearalenone Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	75-100ppb 200-250ppb 400-450ppb 800-1000ppb	3+3 min
YRF1014-1	Ochratoxin A Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	40-50ppb 80-100ppb	3+3 min
YRF1014-2	Ochratoxin A Rapid Test Kit	10/48T	Cereal, wine, coffee powder	For cereal: 5ppb wine: 2ppb coffee powder: 5ppb	3+3 min
YRF1005-1	T-2 toxin Rapid Test Kit for Feed	48T	Feed	80-100ppb 300-500ppb 1800-2000ppb	3+3 min
YRF1006-1	Fumonisins B1 Rapid Test Kit for Feed	48T	Feed	For feed: 5ppm, For feed raw materials: 30ppm	3+3 min

\*The information is for reference purpose only, please in kind prevail.

## **DEOXYNIVALENOL RAPID TEST KIT FOR CEREALS AND FEED**

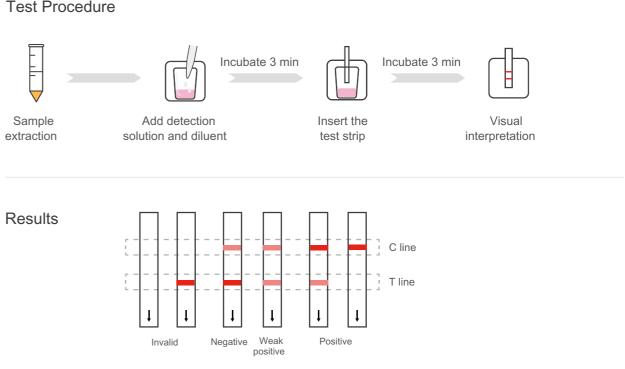
Bioeasy DON Rapid Test Kit for Cereals and Feed is a rapid detection assay for DON in commodities as feed, cereals and grain by-products like wheat, corn, bran, wheat midding, flour and DDGS.



#### **Test Procedure**



Sample extraction Add detection



#### Specification

Art. No.	Product	Spec.	Applica- tion	LOD	Test Time	
YRF1011-2	Deoxynivalenol Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	400-500ppb, 800-1000ppb 2500-3000ppb, 4500-5000ppb	3+4 min	
Shelf life: 12 months Storage: at 2~30°C						



#### Sensitivity: limits of detection(µg/kg-ppb)

Residue Name	LOD 1	LOD 2	LOD 3	LOD 4
Deoxynivalenol	400-500	800-1000	1500-2000	2500-3000

Specificity: No cross reaction with 50mg/kg Aflatoxin B1, Melamine, Zearalenone, Ochratoxin, Fumonisin, Olaquindox etc.

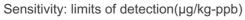
## **TOTAL AFLATOXIN RAPID TEST KIT FOR CEREAL AND FEED**

Bioeasy Total Aflatoxin Rapid Test Kit for Cereals and Feed is a rapid detection assay for total aflatoxin in commodities as feed, cereals and grain by-products like wheat, corn, bran, wheat midding, flour, DDGS.

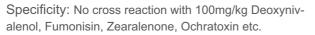
#### Advantages

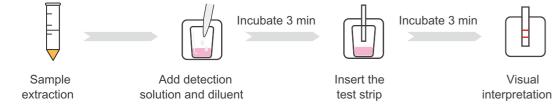
- Rapid: Result in 6 min
- Sensitive: Comply with different MRL requirements
- Simple: Test at room temperature
- Visual interpretation of results
- Accurate and reliable
- Cost Effective

#### Test Procedure

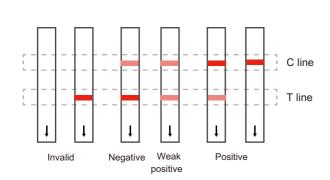


Residue Name	LOD 1	LOD 2	LOD 3	LOD 4
Aflatoxin (B1, B2, G1, G2)	3-5	8-10	15-20	45-50





Results

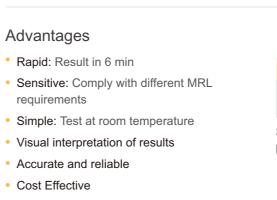


#### Specification

Art. No.	Product	Spec.	Applica- tion	LOD	Test Time		
YRF1001-2	Total Aflatoxin Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	3-5ppb, 8-10ppb 15-20ppb, 45-50ppb	3+3 min		
Shelf life: 12 months Storage: at 2~30°C							

## **ZEARALENONE RAPID TEST KIT FOR CEREALS AND FEED**

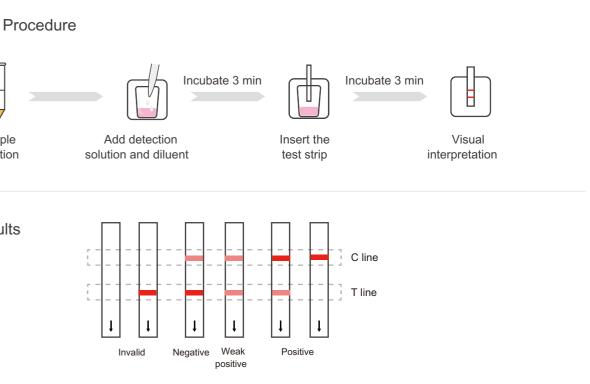
Bioeasy ZEN Rapid Test Kit for Cereals and Feed is a rapid detection assay for Zearalenone in commodities as cereals, feed, and feed raw materials.



#### Test Procedure



extraction



#### Specification

	Art. No.	Product	Spec.	Applica- tion	LOD	Test Time
	YRF1003-3	Zearalenone Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	75-100ppb, 200-250ppb 400-450ppb, 800-1000ppb	3+3 min
Shelf life: 12 months Storage: at 2~30°C						



#### Sensitivity: limits of detection(µg/kg-ppb)

Residue Name	LOD 1	LOD 2	LOD 3	LOD 4
Zearalenone	75-100	200-250	400-450	800-1000

Specificity: This test kit does not cross-react with 100mg/ kg of DON, Fumonisins, Ochratoxin A, Aflatoxin B1, etc.

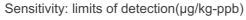
## **OCHRATOXIN A RAPID TEST KIT**

Bioeasy Ochratoxin Rapid Test Kit has been developed into the product that can detect the presence of OTA in cereals and feed, or in wine and coffee powder.

#### Advantages

- · Rapid: Result in 6 min
- Sensitive: Comply with different MRL requirements
- Simple: Test at room temperature
- Visual interpretation of results
- · Accurate and reliable
- Cost Effective

#### **Test Procedure**



Residue Name	LOD 1	LOD 2	LOD 3
Ochratoxin -1	40-50	80-100	/
Ochratoxin -2	Cereals 5 ppb	Wine 2 ppb	Coffee powder 5 ppb

Specificity: No cross reaction with 100mg/kg Deoxynivalenol, Fumonisin, Zearalenone, Ochratoxin etc.

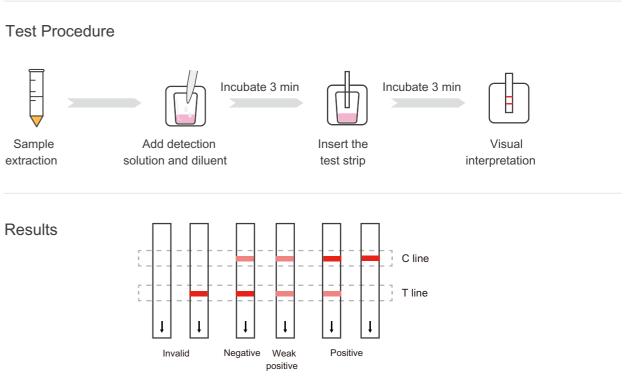
## **T-2 TOXIN RAPID TEST KIT FOR FEED**

This rapid test is used for detection of T-2 toxin in feed and feed raw materials based on the colloidal gold immunochromatography technology. The whole process includes two parts: sample preparation and detection. It takes about 7-10 min for sample preparation and 6 min for detection.

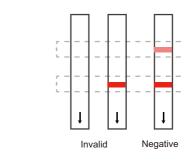
#### Advantages • Rapid: Result in 6 min • Sensitive: Comply with different MRL

- requirements
- Simple: Test at room temperature
- · Visual interpretation of results
- Accurate and reliable
- Cost Effective

### **Test Procedure**



extraction

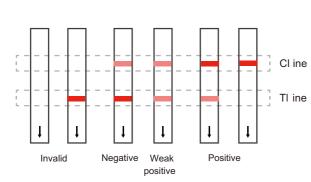


#### Specification

Art. No.	Product	Spec.	Applica- tion	LOD	Test Time
YRF1005-1	T-2 toxin Rapid Test Kit for Feed	48T	Feed	80-100ppb, 300-500ppb, 1800-2000ppb	3+3 min
Shelf life: 12 mo	nths Storage: at 2~30°C				

#### Incubate 3 min Incubate 3 min Ħ Sample Add detection solution Insert the Visual extraction and ultrapure water test strip interpretation

Results



#### Specification

Art. No.		Spec.	Applica- tion	LOD	
YRF1014-1	Ochratoxin A Rapid Test Kit for Cereals and Feed	48T	Cereals, Feed	40-50ppb, 80-100ppb	3+3 min
YRF1014-2	Ochratoxin A Rapid Test Kit	10/48T	Cereal, wine, coffee powder	Cereal: 5ppb Wine: 2ppb Coffee powder: 5ppb	3+3 min

Storage: at 2~30°C Shelf life: 12 months



Sensitivity: limits of detection(µg/kg-ppb)

Residue Name	LOD 1	LOD 2	LOD 3
T-2 Toxin	80-100	300-500	1800-2000

Specificity: This test kit does not cross-react with 100mg/ kg of DON, Fumonisins, Ochratoxin A, Aflatoxin B1, etc.

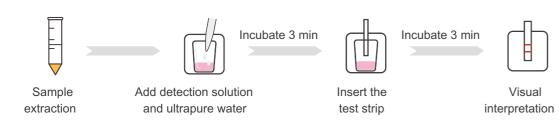
## **FUMONISINS B1 RAPID TEST KIT FOR FEED**

Bioeasy Fumonisin B1 Rapid Test Kit for Cereals and Feed is a rapid detection assay for Fumonisin B1 in commodities as feed and the feed raw materials on-site or in laboratory.

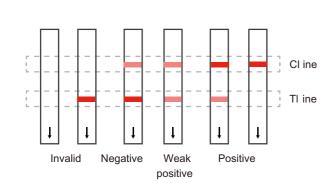
#### Advantages

- Rapid: Results in 15 minutes
- Sensitive: Comply with different EU MRL requirements
- Simple: Visual interpretation of results
- Accurate and reliable
- Cost Effective

#### **Test Procedure**



Results



#### Specification

Art. No.	Product	Spec.	Applica- tion	Quantitative LOD	Test Time
YRF1006-1	Fumonisins B1 Rapid Test Kit for Feed	48T	Feed	For feed: 5ppm, For feed raw materials: 30ppm	3+3 min

Shelf life: 12 months Storage: at 2~30°C

#### Sensitivity: limits of detection(µg/kg-ppb)

Residue Name	Feed raw materials	Feed products
Fumonisin B1	30	5

Specificity: No cross reaction with 100mg/kg Deoxynivalenol, Zearalenone, Aflatoxin B1, Ochratoxin A etc. Cross-reaction rate with Fumonisin B2 is 20%.





#### YR-010 Pocket Reader

- Small size and portable
- Applicable for single, 2 IN 1, 3 IN 1 and 4 IN 1 qualitative test
- Support connection to mobile phone via Bluetooth
- Interpret result on APP with data exportation and sharing



### YRM-IN03 Micro Heater

- Small size, portable and fast heating.
- 4×4 wells



# CE INSTRUMENT



### YR-10 Test Strip Reader

- Quantitative and qualitative analysis
- Available for USB
- Support self-printing
- Support connecting to software on computer and operate the test.
- Multiple languages: Chinese, English, Russian, Spanish, Portuguese, French.



#### MiniT-N incubator

- 4×8 wells
- Multi-program adjustable
- Perfectly match the need of Mycotoxin quantitative test



# MYCOTOXIN **ELISA TEST**

#### Product category

Art. No.	Product	Spec.	Linear Range	Application	Test Time
YR2F1604	ELISA Test Kit for Aflatoxin B1	96T	2-50ppb	Cereals, Feed	15+5 min
YR2F1701	ELISA Test Kit for Zearalenone	96T	50-1350ppb	Cereals, Feed	15+5 min
YR2F1801	ELISA Test Kit for Deoxynivalenol	96T	300-8100ppb	Cereals, Feed	15+5 min

\*The information is for reference purpose only, please in kind prevail.

## **ELISA TEST KIT FOR AFLATOXIN B1**

Bioeasy ELISA Test Kit for Aflatoxin B1 is qualitative and quantitative assay using direct competitive ELISA method for the detection of aflatoxin B1 in commodities as cereals, feed, corn and corn products (DDGS, corn husk, corn germ feed and corn gluten feed), cottonseed meal, bean pulp, vegetable dregs, citric acid residues, tea leaf grounds, TMR and silage corn.





#### **Test Procedure**







Sample dilution Add 50µL/well detection solution and 100µL/well enzyme conjugate. Mix well.

Sample Addition Transfer 100µL/well diluent sample into the coated plate.



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Sample dilution plate

Coated plate

#### Specification

Art. No.	Product	Spec.	Sensitivity	Linear Range	Application	Test Time	
YR2F1604	ELISA Test Kit for Aflatoxin B1	96T	2ppb	2-50ppb	Cereals, feed	15+5 min	
Shelf life: 12 months Storage: at 2-8°C, no freezing							

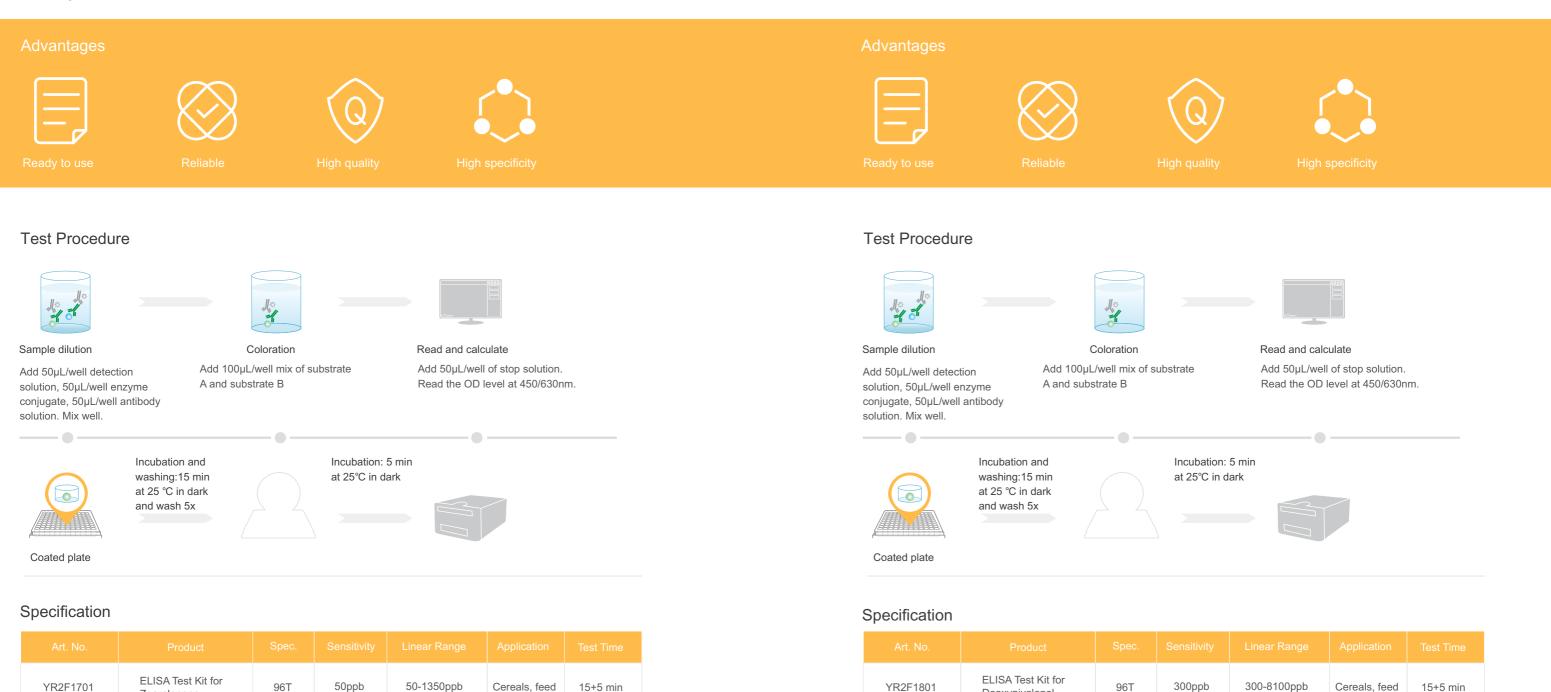


## **ELISA TEST KIT FOR ZEARALENONE**

Bioeasy ELISA Test Kit for Zearalenone is qualitative and quantitative assay using indirect competitive ELISA method for the detection of Zearalenone in commodities as cereals, feed, corn and corn products (DDGS, corn husk, corn germ feed and corn gluten feed), cottonseed meal, bean pulp, vegetable dregs, citric acid residues, tea leaf grounds, TMR and silage corn.

# ELISA TEST KIT FOR DEOXYNIVALENOL

Bioeasy ELISA Test Kit for Deoxynivalenol is qualitative and quantitative assay using indirect competitive ELISA method for the detection of Deoxynivalenol in commodities as cereals, feed, corn and corn products (DDGS, corn husk, corn germ feed and corn gluten feed), cottonseed meal, bean pulp and vegetable dregs.



Shelf life: 12 months

Storage: at 2-8°C, no freezing

Zearalenone

21/22



Storage: at 2-8°C, no freezing

Deoxynivalenol

Shelf life: 12 months

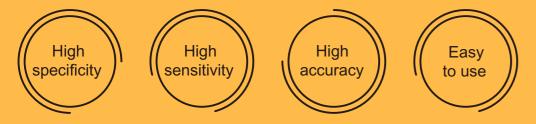


# **IMMUNOAFFINITY** COLUMN

#### Introduction

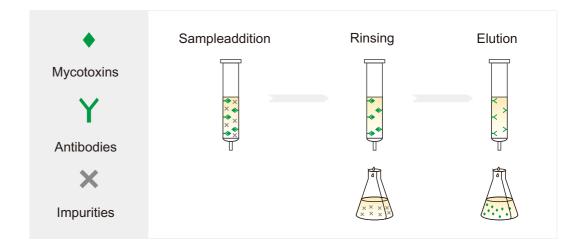
Bioeasy immunoaffinity columns (IAC), based on specific binding of antibody and antigen, are developed into simple and reliable clean-up of a broad range of commodities, including cereals and feed. The immunoaffinity columns can be used for purification and concentration of mycotoxins prior to analyses with HPLC, LC-MS/MS, TLC or EIA.

**Advantages** 



#### How Bioeasy IAC works?

Immunoaffinity columns contain a gel bed with toxin-specific antibodies coupled to the gel particles. These antibodies will capture the analytes of interest in a sample and release them after a washing step, where impurities are washed from the column.



#### Product category

Art No.	Product	Column capacity	Spec.
YRIAC3001-1	Aflatoxin B1/B2/G1/G2	AFB1=160ng,AFB2=80ng, AFG1=160ng, AFG2=80ng	3mL, 25pcs
YRIAC3002-1	Aflatoxin M1/M2	AFM1=80ng, AFM2=80ng	3mL, 25pcs
YRIAC3003-1	Zearalenone	ZEN=1500ng	3mL, 25pcs
YRIAC3004-1	Deoxynivalenol	DON=2000ng, 3-ADON=1000ng, 15-ADON=1500ng, NIV=1500ng	3mL, 25pcs
YRIAC3005-1	Ochratoxin A	OTA=100ng	3mL, 25pcs
YRIAC3006-1	T-2	T-2=2000ng, HT-2=1000ng	3mL, 25pcs
YRIAC3007-1	Fumonisins B1	FB1=4500ng	3mL, 25pcs
Shelf life: 12 months	Storage: at 2~8°C		

\*Customized services available \*The information is for reference purpose only, please in kind prevail.

