



## Precise Numerical Results

Zearalenone is an estrogenic mycotoxin produced by the fungus *Fusarium graminearum*. Zearalenone induces feminization in animals at concentrations in feed of about 1 mg/kg. Higher concentrations (50–100 mg/kg) can interfere with conception, ovulation, implantation, fetal development, and the viability of newborn animals. Increasingly concerned with human ingestion of this mycotoxin, the European Union has established the following regulations for zearalenone:

- Bread, pastries and biscuits 50 ppb
- Cereal flour (except maize flour) 75 ppb
- Cereal snacks and breakfast cereals 50 ppb
- Maize for direct human consumption and maize-based snacks and cereals 100 ppb
- Processed maize-based foods for infants and young children 100 ppb
- Refined maize oil 400 ppb
- Unprocessed cereals (other than maize) 100 ppb
- Unprocessed maize not intended for wet milling 350 ppb

Using monoclonal antibody-based affinity chromatography, ZearalaTest™ WB is a new HPLC test for the detection of zearalenone using wide bore immunoaffinity columns. With a total volume of 3 mL, compared to the total of 1 mL in VICAM's standard columns, ZearalaTest WB allows for a faster flow rate preferred by many laboratories and is the ideal cleanup step for any HPLC.

ZearalaTest WB is one of many wide bore columns available from VICAM. Through the development of this fast-flow WB product line, VICAM demonstrates a commitment to improving mycotoxin testing and responding to our customers' needs.

### HERE'S HOW SIMPLE VICAM TESTS ARE TO USE:

#### EXTRACT SAMPLE

- Grind and weigh sample
- Add salt and methanol/water mixture
- Blend and filter

#### DILUTE AND FILTER

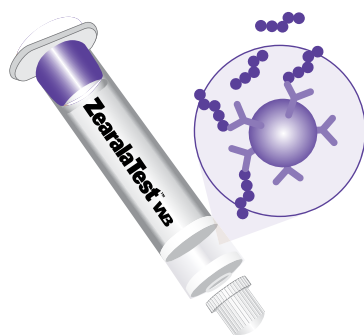
- Dilute extract
- Filter

#### ABSORB AND ELUTE

- Pass filtrate over ZearalaTest WB affinity column
- Wash column
- Elute zearalenone and collect in a cuvette

#### MEASURE

- Inject eluate into HPLC
- Determine zearalenone concentration



#### BENEFITS

- Exclusive** – Specifically for HPLC use
- Durable** – Long shelf life; requires no refrigeration
- Versatile** – For use with a variety of samples
- Quick** – 20 minutes to isolate toxin\*
- Wide Range** – Detects levels as high as 1500 ng
- Fast Flow** – Passes more volume over the column
- Limit of Detection** – 1.9 µg/kg

\*excludes preparation and extraction

## ORDERING INFORMATION

Cat. No.	Description
10000189	Zearalenone WB HPLC Kit (100 Columns + 1 Zearalenone Standard)
176002723	ZearalaTest WB HPLC Kit (50 Columns + 1 Zearalenone Standard)
G1026	ZearalaTest WB Columns (25 per Box)
31955	Microfiber Filters, 1.5 µm, 11 cm (100)
31240	Fluted Filter Paper, 24 cm (100)
35016	Methanol, HPLC Grade (4 X 4 L)
G1118	WB Column Coupling (6)
20050	Graduated Cylinder, 50 mL
20250	Graduated Cylinder, 250 mL
21020	Single Position Pump Stand <sup>†</sup>
23040	Vortex Mixer

**Also required, must be sourced locally:**

Distilled, Reverse Osmosis, or Deionized Water

<sup>†</sup>Multiple position pump stands available

Subject to change without notice.

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The analytical methods presented in this data sheet have been researched and developed by VICAM to be used exclusively with ZearalaTest WB products. These methods have been validated in the VICAM laboratories to perform to the specifications indicated in the ZearalaTest WB procedures. The user assumes all risk in using ZearalaTest WB procedures and products. VICAM makes no warranty of any kind, expressed or implied, other than that ZearalaTest WB products conform to VICAM's printed specification and quality control standards. VICAM will, at its option, repair or replace any product, or part thereof, which proves to be defective in workmanship or material. VICAM's undertaking to repair or service such products is exclusive and is in lieu of all other warranties whether written, oral, expressed, or implied, including any implied warranty of merchantability or fitness for a particular purpose. VICAM shall have no liability for anticipated or lost profits or any loss, inconvenience or damage whether direct, indirect, incidental, consequential or otherwise, to person or property, or for strict liability or negligence arising from or in connection with the use of these assay procedures or ZearalaTest WB products.

**Orders:**1848 N Deffer Drive  
Nixa, MO 65714 USATel: +1.877.228.4244  
+1.417.725.6588

Fax: +1.417.725.6102

[orders@vicam.com](mailto:orders@vicam.com)**Headquarters:**34 Maple Street  
Milford, MA 01757 USATel: +1.800.338.4381  
+1.508.482.4935

Fax: +1.508.482.4972

[www.vicam.com](http://www.vicam.com)