



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 intended for direct human consumption and for maize-based snacks and cereals 100 ppb
- Processed maize-based foods for infants and young children 20 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.

Cultivating Success Through Science™:

Extract Sample

- Grind and weigh sample
- Add salt and methanol/water mixture
- Filter

Dilute and Filter

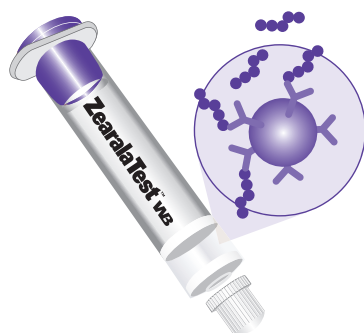
- Dilute extract
- Blend and filter

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	Cat. No.	Description
100000189	Zearalenone WB HPLC Kit (100 Columns + 1 Set Zearalenone Standards)	20050	Graduated Cylinder, 50 mL
G1026	ZearalaTest WB Columns (25 per Box)	20250	Graduated Cylinder, 250 mL
31955	Microfiber Filters, 1.5 µm, 11 cm (100)	21020	Single Position Pump Stand†
35016	Methanol, HPLC Grade (4 X 4 L)	23040	Vortex Mixer
G1118	WB Column Coupling (6)		

Also required, must be sourced locally:

Distilled, Reverse Osmosis, or Deionized Water

†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 Waters' printed specification and quality control standards. Waters 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.

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