

Waters™ | **VICAM™**

PRODUCT GUIDE

2023



[ONGOING DEDICATION TO FOOD SAFETY]

VICAM's mission is rooted in the fundamental human need for safe and abundant food supply. As awareness of the dangers of naturally occurring agricultural contaminants continues to grow, concern about the safety and quality of globally sourced food has become increasingly widespread. The need to routinely monitor for the occurrence of these contaminants inspired VICAM's commitment to the research, development, and worldwide distribution of advanced rapid diagnostic solutions for food safety.

VICAM stands ready to meet the needs of every sector of today's complex global supply chain. With a comprehensive product line vetted by industry leaders and trusted by customers in more than 100 countries, VICAM is the global provider of choice for next-generation food safety technology and rapid mycotoxin test solutions.



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[MARKETS]



Bisphenol A

Bisphenol A (BPA) regulations continue to evolve in response to mounting scientific and consumer concern about its potential impact on public health and the environment. The use of BPA in baby bottles, sippy cups, and infant formula packaging is illegal in the U.S., Canada, the EU, and several Asian countries.

VICAM's BPATest™ pairs immunoaffinity chromatography with liquid chromatography (HPLC, UPLC) combined with fluorescence or mass spectrometry detectors to accurately, precisely, and reliably detect and measure sub-ppb levels of BPA in complex matrices.

Bisphenol A Testing Solutions

- BPATest



Botanicals

To ensure the purity and safety of botanical products, manufacturers monitor for the presence of mycotoxins such as aflatoxin and ochratoxin A. Botanical and herbal products are subject to global regulatory limits as low as 10 parts per billion (ppb) for ochratoxin A, and 2 ppb for aflatoxin B₁ for edible products. VICAM offers a full range of on-site detection systems and laboratory methods for quantitation and confirmation to meet regulatory limits for mycotoxins in botanicals.

Botanicals Mycotoxin Testing Solutions

- AflaOchra™
- AflaTest™
- AflaTest™ WB
- AflaTest WB SR+
- OchraTest™
- OchraTest™ WB

Coffee

Coffee is among several food and agricultural commodities required to meet regulatory limits for mycotoxins such as ochratoxin. VICAM offers on-site and laboratory based methods for ochratoxin A detection at levels as low as 2 ppb, easily meeting EU and other export regulatory limits. Pro-active monitoring ensures that only the highest quality coffee reaches the marketplace, establishing brand strength and trust across the global supply chain.

Coffee Mycotoxin Testing Solutions

- AflaTest WB SR+
- OchraTest
- OchraTest WB
- Ochra-V AQUA



Corn

Corn/maize is at risk for the presence of mycotoxins such as aflatoxin, vomitoxin (DON), fumonisin, zearalenone, and ochratoxin. Global regulations set limits for maximum allowable levels of mycotoxins in maize as low as 2 parts per billion (ppb) for aflatoxin B₁, 750 ppb deoxynivalenol (DON), 200 ppb fumonisin, 3 ppb ochratoxin A and 60 ppb of zearalenone. VICAM offers a full range of versatile, practical screening and quantitative solutions for on-site and laboratory detection of mycotoxins in corn.

Corn Mycotoxin Testing Solutions

Strip Tests

- Afla-V ONE
- DON-V ONE
- Afla-V AQUA
- DON-V
- DON-V AQUA
- Fumo-V AQUA
- Ochra-V AQUA
- Zearala-V AQUA
- T2/HT2-V AQUA

Immunoaffinity Columns — Single Toxin

- AflaTest
- AflaTest WB/SR & SR+
- DONtest
- DONtest WB
- FumoniTest
- FumoniTest WB
- OchraTest
- OchraTest WB
- T-2test LC
- T-2/HT-2 LC
- ZearalaTest
- ZearalaTest WB

Immunoaffinity Columns — Multi Toxin

- AflaOchra LC
- AOZ LC
- DON-NIV WB
- T2/HT-2 LC
- Myco 6in1+

Dairy

If dairy cattle are fed rations containing aflatoxin or other mycotoxins, contamination may appear in the cow's milk, rendering it unsafe for human consumption. Global regulatory limits for aflatoxin in milk and other dairy products are as low as 0.05 parts per billion, with even lower limits for food intended for children. VICAM offers rapid, accurate test kits that deliver precise data to ensure dairy products are safe to consume.

Dairy Mycotoxin Testing Solutions

Strip Tests

- Afla-V
- Afla M₁-V

Immunoaffinity Columns

- AflaTest
- Afla M₁ FL⁺™
- Afla M₁™ LC

DDGs/Ethanol

Ethanol co-products such as dried distillers' grains (DDG), distillers grains with soluble (DDGS), wet distillers grains (WDGS), and heavy steep water (HSW) are valuable nutrition sources for livestock producers. However, if inbound corn contains aflatoxin, fumonisin or other mycotoxins prior to processing, the final co-products streams will contain concentrated levels of mycotoxins. Rapid, on-site mycotoxin monitoring tools from VICAM help protect the value of ethanol co-products, ensuring safety and marketability.

DDGs/Ethanol Mycotoxin Testing Solutions

- AflaTest
- AflaTest WB
- Afla-V AQUA
- DONtest™ HPLC
- DONtest WB
- DON-V
- FumoniTest
- FumoniTest WB
- Fumo-V AQUA



Dried Fruit

Dried fruit is at risk for mycotoxins such as aflatoxin and ochratoxin A which may be present in the fresh fruit counterpart prior to drying. EU countries enforce maximum allowable limits for dried fruits at levels as low as 5 parts per billion (ppb) for aflatoxin B₁ and 10 ppb for ochratoxin A. VICAM's complete family of AOAC and USDA approved methods ensure rapid, actionable data to support dried fruit exports worldwide.

Dried Fruit Mycotoxin Testing Solutions

- AflaOchra LC
- AflaTest
- AflaTest WB
- OchraTest
- OchraTest WB



Feed and Grain

Corn, wheat, rice, barley, and grain crops are acutely vulnerable to mycotoxins, a family of microcontaminants that pose a threat to quality, safety, and profitability of grain-based products. As regulatory agencies intensify scrutiny of domestic and imported grain commodities for unsafe levels of mycotoxins, farmers, processors, and storage facilities rely on frequent testing at every phase of production. VICAM offers a comprehensive line of USDA-FGIS and AOAC approved mycotoxin testing solutions for feed and grain.

Feed and Grain Mycotoxin Testing Solutions

Strip Tests

- Afla-V ONE
- DON-V ONE
- Afla-V AQUA
- DON-V,
- DON-V AQUA
- Fumo-V AQUA
- Ochra-V AQUA
- Zearala-V AQUA
- T2/HT2-V AQUA

Immunoaffinity Columns — Single Toxin

- AflaTest
- AflaTest WB/SR & SR+
- DONtest
- DONtest WB
- FumoniTest
- FumoniTest WB
- OchraTest
- OchraTest WB
- T-2test LC
- T-2/HT-2 LC, ZearalaTest
- ZearalaTest WB

Immunoaffinity Columns — Multi Toxin

- AflaOchra LC
- AOZ LC
- DON-NIV WB
- T2/HT-2 LC
- Myco 6in1+

Glyphosate

Glyphosate is the most widely used herbicide used to control broadleaf weeds and grasses in agricultural, landscaping and household gardening applications. The International Agency for Research on Cancer classifies glyphosate as a "Probable Carcinogen". Concerns regarding human and animal health impacts have resulted in regulatory discussion and actions with the goal of assuring quality and safety of grain, food and feed across the global value chain. VICAM offers a fully quantitative lateral flow strip tests able to measure total glyphosate concentrations in cereal grains and water samples.

Glyphosate Testing Solutions

Strip Tests

- Glyphosate-V



Peanuts

Peanut contact with soil during cultivation may result in exposure to mycotoxin-producing molds. Aflatoxin is classified as a Group I carcinogen by the International Agency for Research on Cancer (IARC) and is regulated in 60+ countries at levels as low as 2 parts per billion (ppb) for aflatoxin B₁ and 4 ppb for total aflatoxins. Ensure the safety and marketability of peanut products with VICAM's complete array of AOAC and USDA approved methods for on-site or laboratory detection.

Peanuts Mycotoxin Testing Solutions

- Afla-V
- Afla-V AQUA
- AflaTest
- AflaTest WB/SR and SR+



Pet Food

Mycotoxins, the toxic chemical byproducts of naturally occurring molds, are among the most common risks for pet food companies today. The US FDA recommendation for pet foods indicates maximum levels for aflatoxin at less than 20 ppb and less than 5 parts per million (ppm) for deoxynivalenol (DON). VICAM's AOAC and USDA-GIPSA approved diagnostic kits provide the most comprehensive and effective tools for mycotoxin monitoring and prevention in pet food.

Pet Food Mycotoxin Testing Solutions

Strip Tests

- Afla-V ONE
- DON-V ONE
- Afla-V AQUA
- DON-V
- DON-V AQUA
- Fumo-V AQUA
- Ochra-V AQUA
- Zearala-V AQUA
- T2/HT2-V AQUA

Immunoaffinity Columns — Single Toxin

- AflaTest
- AflaTest WB/SR & SR+
- DONtest
- DONtest WB
- FumoniTest
- FumoniTest WB
- OchraTest
- OchraTest WB
- T-2test LC
- T-2/HT-2 LC
- ZearalaTest
- ZearalaTest WB

Immunoaffinity Columns — Multi Toxin

- AflaOchra LC
- AOZ LC
- DON-NIV WB
- T2/HT-2 LC
- Myco 6in1+

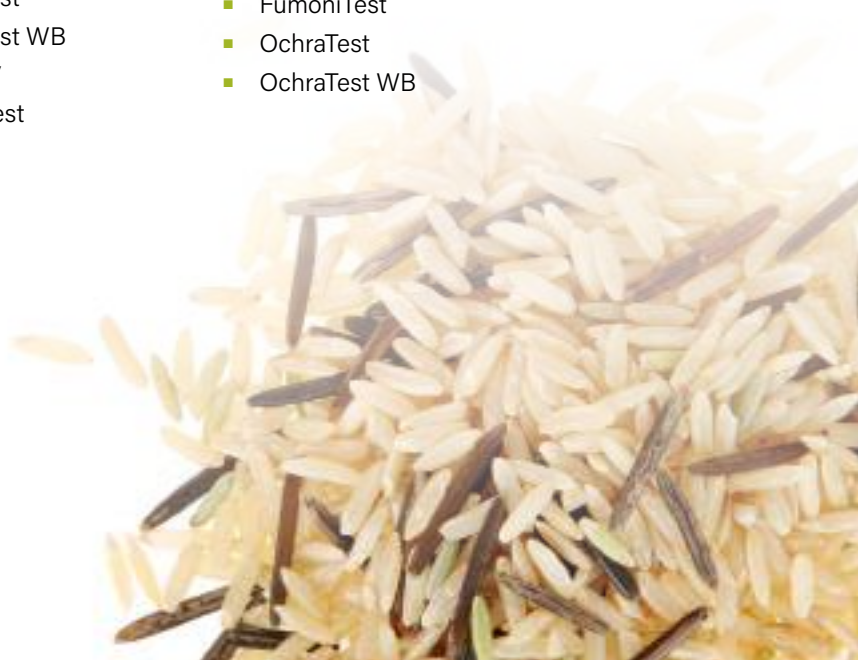


Rice

Like other field crops, rice is vulnerable to the presence of mycotoxins when specific mold species appear during growth, harvest, storage or processing. Aflatoxin B₁ is highly toxic – even at very low concentrations – resulting in regulatory limits in most importing countries as low as 2 parts per billion (ppb). VICAM offers comprehensive screening and detection solutions to ensure a safe, marketable rice supply worldwide.

Rice Mycotoxin Testing Solutions

- AflaOchra HPLC
- AflaTest
- AflaTest WB
- Afla-V
- CitriTest
- DONtest
- FumoniTest
- OchraTest
- OchraTest WB



Spices

Despite good cultivation practices, spices may be at risk for mycotoxins when environmental conditions encourage mold growth. Aflatoxin and ochratoxin are the most common to affect spice products. Global legislation places maximum allowable limits on domestic and imported food products for levels as low as 2 parts per billion (ppb) in spices. VICAM's fast, effective detection solutions deliver AOAC and USDA approved results to help ensure market ready spice products.

Spices Mycotoxin Testing Solutions

- AflaOchra HPLC
- AflaTest
- AflaTest WB
- AflaTest WB SR+
- OchraTest
- OchraTest WB



Tree Nuts

Tree nuts are at risk for the presence of mycotoxins throughout cultivation and storage when environmental conditions favor mold growth. Global regulatory limits in more than 60 countries establish maximum allowable levels of aflatoxin in tree nuts – as low as 2 parts per billion (ppb) for aflatoxin B₁. VICAM offers rapid, accurate diagnostic test kits for aflatoxin screening and quantitation that meet internal quality requirements and strict global regulations for tree nuts.

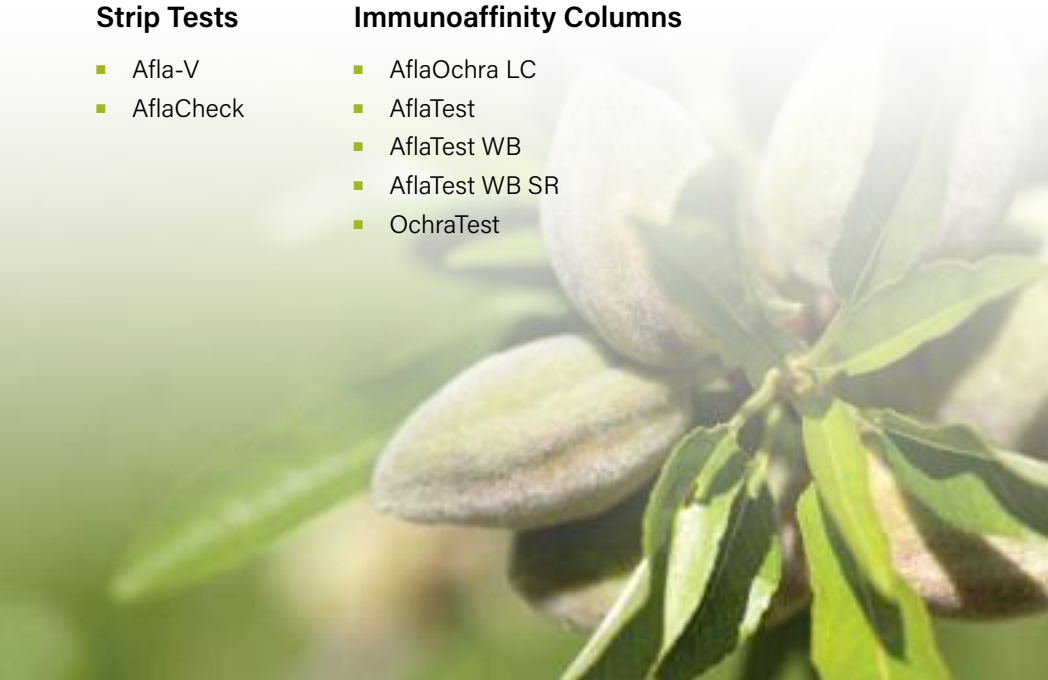
Tree Nuts Mycotoxin Testing Solutions

Strip Tests

- Afla-V
- AflaCheck

Immunoaffinity Columns

- AflaOchra LC
- AflaTest
- AflaTest WB
- AflaTest WB SR
- OchraTest



Wheat

Wheat and other cereal grains are at risk for the presence of mycotoxins such as aflatoxin, vomitoxin (DON), fumonisin, zearalenone, and ochratoxin. Flour millers, bakeries, and import/export regulations set limits for maximum allowable levels as low as 4 parts per billion for aflatoxin, 3 ppb for ochratoxin A, 75 ppb for zearalenone, 500 ppb for deoxynivalenol (DON) and 1,750 ppb for fumonisin. VICAM offers a complete family of screening and quantitative solutions for on-site and laboratory detection of mycotoxins in wheat.

Wheat Mycotoxin Testing Solutions

Strip Tests

- Afla-V
- DON-V
- Afla-V AQUA
- Ochra-V AQUA
- DON-V AQUA
- T2/HT2-V AQUA
- Zearala-V AQUA
- Glyphosate-V

Immunoaffinity Columns — Single Toxin

- AflaTest
- AflaTest WB
- AflaTest WB SR
- DONtest
- DONtest WB
- DON-NIV WB
- T-2 test LC

Immunoaffinity Columns — Multi Toxin

- AflaOchra LC
- AOZ LC
- DON-NIV WB
- Myco 6in1+
- T-2/HT-2 LC



[TECHNOLOGIES]



HPLC/UPLC and LC-MS

Optimized sample cleanup and precise, reproducible results remain the core strength of our HPLC line. VICAM's wide-bore (faster-flow) immunoaffinity columns ensure the increased sample throughput and top-notch HPLC performance you need to boost productivity in today's stringent regulatory environment. VICAM's columns enable labs to analyze parts per billion (ppb) levels of several simultaneously occurring mycotoxins in a single HPLC or UPLC™ run.

HPLC/UPLC and LC-MS Mycotoxin and Bisphenol A Testing Solutions

- Afla B™
- Afla M₁ HPLC
- Afla Ochra HPLC
- AflaTest
- AflaTest WB
- AflaTest WB SR
- AOZ HPLC
- BPATest
- CitriTest HPLC
- DONtest HPLC
- DONtest WB
- DON-NIV™ WB
- FumoniTest
- FumoniTest WB
- Myco6in1+
- OchraTest
- OchraTest WB
- T-2Test HPLC
- T-2/HT-2 HPLC
- ZearalaTest
- ZearalaTest WB



Fluorometer

The VICAM Series-4EX Fluorometer accurately measures down to extremely low ppt concentrations of mycotoxins in samples prepared using VICAM immunoaffinity columns. Expanded data storage capacity allows for storage of all the VICAM mycotoxin test protocols and calibration levels, as well as up to 200 test results. Stored testing protocols provide for a digital readout in ppm, ppb, ppt, mg/kg, µg/kg or ng/kg concentration units without requiring conversion.

Series-4EX Fluorometer Mycotoxin Testing Solutions

- Afla B
- AflaTest
- Afla M₁ FL⁺
- FumoniTest
- OchraTest
- ZearalaTest



Vertu TOUCH Lateral Flow Reader

The Vertu TOUCH lateral flow strip test reader works in concert with VICAM's Vertu strip tests to deliver full-range quantitative results for up to six major mycotoxin, including aflatoxin, fumonisin, vomitoxin (DON), zearalenone, ochratoxin A and the combination of T-2 and HT-2 toxins. The Vertu TOUCH reader offers simple, touch screen operation, on-board data storage and transfer, optional printing and requires no special training or expertise for field, process or laboratory testing environments.

Vertu TOUCH Lateral Flow Reader Mycotoxin Testing Solutions

- Afla-V ONE
- Afla-V AQUA
- DON-V ONE
- DON-V AQUA
- Fumo-V AQUA
- Glyphosate-V
- Ochra-V AQUA
- Zearala-V AQUA
- T2/HT2-V AQUA
- Myco 5-in-1 PLUS



Quantitative Strip Tests

VICAM's portfolio of quantitative strip tests, which are used in conjunction with the VICAM Vertu Lateral Flow Reader, provide validated monitoring solutions for companies seeking to minimize the costly consequences of mycotoxin contamination. Utilizing the proven sensitivity and selectivity of VICAM's monoclonal antibodies, quantitative strip tests can accurately detect and measure a variety of mycotoxins in less than 5 minutes*. The tests can be easily performed on-site or in the lab, require no special training and have a long shelf life. Regulatory compliance and risk management decisions demand proven solutions to provide accurate, precise results – screen, quantify, and confirm mycotoxin levels with total confidence.

Quantitative Strip Test Mycotoxin Testing Solutions

- Afla M₁-V
- Afla-V
- Afla-V ONE
- Afla-V AQUA
- DON-V
- DON-V ONE
- Fumo-V AQUA
- Glyphosate-V
- T2-HT2-V
- Zearala-V AQUA

**after extraction*



Qualitative Strip Tests

Regulatory compliance and risk management decisions demand proven solutions. VICAM's portfolio of AOAC and USDA/GIPSA approved tests provides validated monitoring solutions for companies seeking to minimize the costly consequences of mycotoxin contamination. Built upon the highly specific reactions between antibodies and target contaminant, VICAM's Qualitative Strip Tests for aflatoxins and deoxynivalenol (DON) deliver fast, accurate, on-the-spot results in as little as 3 minutes. This inexpensive testing protocol can be used with a variety of samples and requires no special training or equipment.

Qualitative Strip Test Mycotoxin Testing Solutions

- AflaCheck
- DONCheck



[PRODUCTS]



A close-up photograph of a clear glass filled with a white, powdery substance. A white rod or stick is inserted into the powder, extending from the top of the frame down into the glass. The background is a solid, light blue color.

Aflatoxin Testing Solutions

AflaTest is a quantitative method for the detection of aflatoxin in many commodities. VICAM's advanced biotechnology permits the measurement of aflatoxins (including AFB₁, AFB₂, AFG₁, AFG₂, AFM₁, and M₂). The AflaTest mycotoxin testing system can be used in a wide variety of locations from the local farm elevator to food processing quality control laboratories to government testing laboratories.

Benefits

- **Convenient** – For use with fluorometer, HPLC or UPLC
- **Comprehensive** – Total readings for all aflatoxins
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – For use with a variety of samples
- **Quick** – Less than 10 minutes to isolate toxin*
- **Wide Range** – Detects levels as high as 1000 ppb and as low as 0.1 ppb**

**excluding preparation and extraction*

***1 ppb for grain and nuts*

- **Safe** – Requires less toxic materials than other methods

Applications

- Botanicals
- Corn
- Dairy
- DDGs/Ethanol
- Dried Fruit
- Feed and Grain
- Peanuts
- Pet Food
- Rice
- Spices
- Tree Nuts
- Wheat



AflaTest™ WB

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1024

AflaTest WB is an HPLC-only test for the detection of aflatoxins B₁, B₂, G₁, G₂, M₁, and M₂ using wide bore immunoaffinity columns. With a total volume of 3 mL, AflaTest WB allows for a faster flow rate preferred by many laboratories and is the ideal cleanup step for any HPLC. AflaTest WB can be used in control laboratories of food quality and safety and commercial testing laboratories.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Comprehensive** – Total readings for all aflatoxins
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – For use with a variety of samples
- **Quick** – 15 minutes to isolate toxin*
- **Wide Range** – Detects levels as high as 100 ppb and as low as 0.03 ppb for aflatoxin B₁

**excluding preparation and extraction*

- **Fast Flow** – Passes more volume over the column

Applications

- Botanicals
- Corn
- DDGs/Ethanol
- Dried Fruit
- Feed and Grain
- Peanuts
- Pet Food
- Rice
- Spices
- Tree Nuts
- Wheat



AflaTest WB^{SR} is a quantitative method that uses immunoaffinity chromatography to selectively isolate aflatoxins B₁, B₂, G₁, G₂, M₁, and M₂ for HPLC or UPLC analysis. The SR test kit's fast-flow widebore columns are specially designed to maximize aflatoxin G₂ recovery and accelerate sample throughput. AflaTest WB^{SR} can be used in control laboratories of food quality and safety and commercial testing laboratories.

Benefits

- **Powerful** – Designed exclusively for laboratory use
- **Enhanced Recovery** – Improved aflatoxin G₂ recovery
- **Comprehensive** – Determines individual aflatoxin levels (B₁, B₂, G₁, G₂, M₁, and M₂)
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – For use with a variety of samples
- **Quick** – 15 minutes to isolate toxin*
- **Wide Range** – Detects total aflatoxin levels as high as 500 ng and as low 0.005 ng for total aflatoxin
- **Fast Flow** – Passes more volume over the column

**excluding preparation and extraction*

Applications

- Almonds
- Feed and Grain
- Pet Food
- Tree Nuts



AflaTest[™] WB SR⁺

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. 176004746

AflaTest WB SR⁺ is an exciting, fully quantitative approach that uses immuno-affinity chromatography to selectively isolate aflatoxins B₁, B₂, G₁, G₂, M₁, M₂ and sterigmatocystin for LC and LC-MS/MS analysis. The WB SR⁺ column is able to tolerate exposure to high concentrations of acetonitrile (30%) and methanol (40%) extraction solvents, provide a streamlined approach to complex sample analysis and optimize recoveries for an array of sample types. With column capacity as high as 1,000 ng, AflaTest WB SR⁺ provides exceptional recoveries (90-110%) for aflatoxins and their metabolites, delivering speed, specificity and defensible analytical measurements to food and agricultural laboratories worldwide.

Benefits

- **Powerful** - Designed to perform superior to AOAC Method performance requirements
- **Solvent Tolerant** - Proprietary antibodies perform well in the presence of 30% Acetonitrile or 40% Methanol
- **Complex Samples** - Exceptional performance (>90% recovery) in spices, herbs, grains, feeds, peanuts and peanut oil
- **Comprehensive** - Detect and quantify aflatoxins B₁, B₂, G₁, G₂, M₁, M₂ and Sterigmatocystin
- **Wide Range** - Detects total aflatoxin levels as high as 1,000 ng and as low as 0.05 ng
- **Quick** - 15 Minutes to isolate toxins*

Applications

- Grains
- Spices
- Medicinal Herbs
- Coffee
- Peanuts
- Peanut Oil



**excluding preparation and extraction*

Using monoclonal antibody-based affinity chromatography, Afla B is a quantitative method that can isolate aflatoxins B₁ and B₂ from corn via fluorometric or HPLC detection. Afla B is sensitive, simple, and fast, enabling quick tests for parts per billion or parts per trillion levels. Afla B can be used in a wide variety of locations from the local farm elevator to food QC and safety laboratories.

Benefits

- **Convenient** – For use with fluorometer, HPLC or UPLC
- **Durable** – Long shelf life; requires no refrigeration
- **Quick** – Less than 10 minutes to isolate toxin*
- **Wide Range** – Detects levels as low as 1 ppb (fluorometer) and 50 ppt (HPLC) and as high as 300 ppb
- **Safe** – Requires less toxic materials than other methods

**excluding preparation and extraction*

Applications

- Corn



AflaCHECK™

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. 100000173

Aflatoxin levels in grain, food, and feed are subject to strict regulations in more than 60 countries. AflaCheck is a qualitative one-step test kit for the detection of aflatoxin. AflaCheck uses highly specific reactions between antibodies and aflatoxin to detect aflatoxin in a variety of samples. The test strips can be used to detect the presence of aflatoxin at two different cutoff levels depending on the protocol followed.

Benefits

- **Fast** – Results in as little as 3 minutes*
- **Simple** – No special training or equipment required
- **Accurate** – Detects the presence of aflatoxin at levels of 10 ppb or 20 ppb
- **Convenient** – Can be performed anywhere with a variety of samples
- **Durable** – Long shelf life, no refrigeration required
- **Economical** – Inexpensive first step in your testing protocol
- **Versatile** – Choice of two cut off procedures: 10 ppb and 20 ppb

**excluding preparation and extraction*

Applications

- Corn
- Grain
- Peanuts
- Canola and Canola oil



Strict global regulatory limits govern how much aflatoxin M₁ may be present in dairy products. Using monoclonal antibody-based affinity chromatography, Afla M₁ FL⁺ is a quantitative method for the fluorometer based detection of aflatoxin M₁ in milk at parts per trillion (ppt) levels. Afla M₁ FL⁺ can be performed rapidly, requires no special skills and is useful for both the milk processing QC and government testing laboratory.

Benefits

- **Exclusive** – Specifically for fluorometer use
- **Durable** – Long shelf life; requires no refrigeration
- **Quick** – 25 minutes to isolate toxin
- **Wide Range** – Detects levels as low as 12.5 ppt and as high as 200 ppt without HPLC analysis
- **Safe** – Requires less toxic materials than conventional test methods

Applications

- Dairy



Afla M₁ LC[™]

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1007

Strict global regulatory limits govern how much aflatoxin M₁ may be present in dairy products. Using monoclonal antibody based affinity chromatography, Afla M₁ HPLC is an HPLC or UPLC test for the detection of aflatoxin M₁ using immunoaffinity columns. An ideal cleanup step for any HPLC or UPLC, Afla M₁ HPLC delivers the results dairies need using a fast-flow column that delivers 75% to 95% recovery depending on the sample.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – Can be used with a variety of milk samples
- **Quick** – Sample ready in less than 30 minutes
- **Wide Range** – Detects levels as low as 10 ppt and as high as 3 ppb
- **Safe** – Requires less toxic materials than other methods
- **Comprehensive** – Binds both aflatoxin M₁ and aflatoxin M₂

Applications

- Dairy



Aflatoxin M₁ is the metabolic byproduct created when a cow ingests feed that contains aflatoxin B₁. Aflatoxin M₁ is a Group 2B (probable) carcinogen according to the International Agency for Research on Cancer (IARC). VICAM's Afla M₁-V quantitative strip tests answer one of today's toughest food safety challenges with a new, user-friendly lateral flow strip test for aflatoxin M₁ in dairy products – providing precise results in just minutes.

Benefits

- **Fast Screening** – Results in 10 minutes
- **Simple** – No special training required
- **Sensitive** – Limit of detection as low as 25 ppt
- **Convenient** – Easily performed on-site or in the laboratory
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or transferred to a spreadsheet

Applications

- Dairy





Ordering Information:
Cat. No. 176002071

Afla-V ONE strip tests offer the world's FIRST fully quantitative rapid test for total aflatoxins (B_1 , B_2 , G_1 and G_2) in finished feed and pet food formulations at levels as low as 2 parts per billion (ppb), and as high as 300 ppb. The simple, streamlined procedure saves time and materials, and takes just 8 minutes from start to finish. Digital readings are clearly displayed on the touch screen display of Vertu TOUCH lateral flow reader, eliminating guesswork and providing true quality assurance for feed and pet food quality management teams.

Benefits

- **Safe** – Eliminates toxic calibration chemicals
- **Value** – No hidden costs or sample batching required
- Fast screening – Actionable results in 5 minutes*
- **Sensitive** – Limits of detection as low as 2 ppb
- **Wide range** – 0 to 300 ppb**
- **Convenient** – Easily performed onsite or in the lab
- **Accurate** – Results equivalent to HPLC methods
- **Durable** – Long shelf life

Applications

- Corn



**after extraction*

***limits of detection will vary based on procedure*



Ordering Information:
Cat. No. 176003520 (Corn)
Cat. No. 176003783 (Corn Europe)

Afla-V AQUA Strip Tests utilize the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure total aflatoxins (B₁, B₂, G₁, and G₂) at levels as low as 2.0 ppb and as high as 300 ppb. Afla-V AQUA eliminates the need for hazardous solvents using a water-based, dilution-free extraction procedure that develops in just 5 minutes.* Results are displayed on the digital screen and may also be printed or transferred to Excel for storage and used as a vital quality assurance tool.

Benefits

- **Sustainable** – Safe, solvent-free testing
- **Fast Screening** – Results in 5 minutes*
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 2.0 ppb**
- **Convenient** – Easily performed on-site or in the lab
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or downloaded to a computer
- **Wide Range** – 0 to as high as 300 ppb**
- **Certified** – USDA-GIPSA Certified method available

Applications

- Corn
- Soy



**after extraction*

***limits of detection and range will vary based on procedure*

**Ordering Information:**

Cat No. 176004114

Cat No. 176004261 (IKA mixer)

Cat No. 176008520 (Vertu PREP)

Afla-V AQUA^{HS} Strip Tests utilize the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure total aflatoxins (B₁, B₂, G₁, and G₂) at levels as low as 2 ppb and as high as 100 ppb. Afla-V AQUA^{HS} eliminates the need for hazardous solvents using a water-based dilution-free extraction procedure that develops in just 5 minutes.* Results are displayed on the digital screen and may also be printed or transferred to Excel for storage and use as a vital quality assurance tool.

Benefits

- **Sustainable** – Safe, solvent-free testing
- **Fast Screening** – Results in 5 minutes*
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 2.0 ppb**
- **Convenient** – Easily performed on-site or in the lab
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or downloaded to a computer
- **Wide Range** – 0 to 100 ppb[†]

Applications

- Peanuts



**after extraction*

***limits of detection will vary based on procedure. Refer to manual*

†with dilution

This procedure has been validated for peanuts.

A close-up, shallow depth-of-field photograph of several aluminum beverage cans. The cans are arranged in rows, with the focus on the top of the cans in the foreground, showing the pull-tab mechanism. The background is blurred, creating a sense of depth. The overall color palette is cool, with various shades of blue and grey.

[PRODUCTS]

Bisphenol A Testing Solutions

BPATMTest

BISPHENOL A TESTING SOLUTIONS

Ordering Information:

Cat. No. 176004211

BPATMTest pairs immunoaffinity chromatography with liquid chromatography (HPLC, UPLC) combined with fluorescence or mass spectrometry detectors to accurately, precisely, and reliably detect and measure sub-ppb levels of BPA in complex matrices.

Benefits

- **Fit for Purpose** – Specifically designed for HPLC, UPLC,TM and LC-MS use
- **Wide Range** – Detects levels as low as 0.1 ppb and as high as 50 ppb
- **Versatile** – Works with a variety of samples
- **Powerful** – Simultaneous isolation and purification of target analyte
- **Safe** – Minimizes the use of organic solvents

Applications

- BPA



A close-up photograph of a brown ceramic bowl filled with red rice grains. The bowl is placed on a wooden surface, and several grains have spilled out onto the table. The background is a soft, out-of-focus light brown.

[PRODUCTS]

Citrinin Testing Solutions

CitriTest™ LC

MYCOTOXIN TESTING SYSTEM

Ordering Information:

Cat. No. G1070

CitriTest HPLC is a quantitative method for detection of citrinin in Kogi Red Rice and corn that uses monoclonal antibody-based affinity chromatography. An ideal cleanup step for any HPLC, CitriTest HPLC provides precise numerical results in parts per billion levels. The preferred test of laboratories around the world, no other test comes close for speed, quantification, and specificity.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Convenient** – Uses same methods as other VICAM tests
- **Durable** – Long shelf life
- **Quick** – 20 minutes to isolate toxin*
- **Wide Range** – Detects levels as low as 10 ppb and as high as 500 ppb

**excluding preparation and extraction*

Applications

- Corn
- Rice





[PRODUCTS]

Deoxynivalenol Testing Solutions

DONCHECK™

MYCOTOXIN TESTING SYSTEM

Ordering Information:

Cat. No. 100000198

DONCheck is a simple qualitative test for the detection of the trichothecene mycotoxin deoxynivalenol (DON) in grain samples. Many nations have adopted guidance or maximum allowable levels for DON to control its spread. DONCheck Test Strips provide fast, accurate, on-the-spot results with no special training or expensive equipment required. DONCheck is easy to use in the field or in the lab. Simply dip the Test Strip into the sample and read the results.

Benefits

- **Fast** – Results in as little as 3 minutes*
- **Simple** – No special training or equipment required
- **Accurate** – Detects the presence of DON at 1 ppm
- **Convenient** – Can be performed anywhere
- **Durable** – Long shelf life
- **Economical** – Inexpensive first step in your testing protocol
- **Versatile** – Works with a variety of samples

Applications

- Barley
- Corn
- Wheat

**excluding preparation and extraction*



DONtest[™] LC

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1005

DONtest HPLC is a quantitative method for customers in the food processing industry who need to test samples for the presence of DON (also known as deoxynivalenol or vomitoxin) in parts per million (ppm) levels. DONtest HPLC uses monoclonal antibody-based affinity chromatography to provide a solution that is safe, simple, fast, and works reproducibly and accurately.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Quick** – 10 minutes to isolate toxin*
- **Durable** – Long shelf life
- **Wide Range** – Detects levels as low as 0.10 ppm and as high as 5 ppm
- **Safe** – Requires less toxic materials than other methods

**excluding preparation and extraction*

Applications

- Wheat



DONtest™ WB

MYCOTOXIN TESTING SYSTEM

Ordering Information:

Cat. No. G1065

Deoxynivalenol or DON (also known as vomitoxin) has been isolated from grains and feeds throughout the world at levels as high as 92 ppm. DONtest WB is an HPLC test for the detection of DON at parts per million (ppm) levels using wide bore immunoaffinity columns – the method is simple, accurate, and reproducible. With a total volume of 3 mL, DONtest WB allows for a faster flow rate and is the ideal cleanup step for any HPLC or UPLC.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Durable** – Long shelf life
- **Quick** – 10 minutes to isolate toxin*
- **Wide Range** – Detects levels as low as 0.04 ppm and as high as 5 ppm
- **Fast Flow** – Faster results than narrow bore test

Applications

- Wheat

**excluding preparation and extraction*



DON-V strip tests utilize the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure total DON in grain at levels as low as 0.20 ppm. The single-dilution sample preparation procedure saves time and materials, and the test takes less than 5 minutes* to complete. Digital readings are clearly displayed on the screen of the Vertu Lateral Flow Reader, eliminating any guesswork about the results.

Benefits

- **Fast Screening** – Results in less than 5 minutes*
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 0.20 ppm
- **Convenient** – Easily performed on-site or in the lab
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or downloaded to a computer
- **Wide Range** – 0 to 10 ppm

*after extraction

Applications

- Barley
- Corn
- Wheat





Ordering Information:
Cat. No. 176004973

DON-V AQUA strip tests utilize the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure total DON in grain at levels as low as 0.25 parts per million (ppm). With a simple test procedure and 5 minute development time, DON-V AQUA reduces time and materials for field and laboratory use, and may be used as a part of the Myco 5-in-1 PLUS procedure using one extraction to quantify six major mycotoxins. Results display on the Vertu TOUCH screen, allowing easy data recording, printing, storage and sharing.

Benefits

- **Fast screening** – Results in less than 5 minutes*
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 0.25 ppm
- **Convenient** – Easily performed on-site or in the lab.
- **Durable** — Long shelf life
- **Accurate** — Real-time data which can be printed or downloaded to a computer
- **Wide Range** — 0 to 30 ppm

Applications

- Corn
- Wheat



DON-VTM ONE offers the world's first lateral flow strip test capable of measuring vomitoxin (DON) in complete feeds and pet foods. Using a simple, barcode-based universal calibration, DON-V ONE delivers numeric results in minutes while improving safety and sustainability for field, process and laboratory testing environments. DON-V ONE eliminates high-stakes calibration, reduces time to result and offers unmatched performance for DON monitoring in finished feeds.

Benefits

- **Safe** – Eliminates toxic calibration chemicals
- **Value** – No hidden costs or sample batching required
- **Fast screening** – Actionable results in 5 minutes*
- **Sensitive** – Limits of detection as low as 0.20 ppm
- **Wide range** – 0.20 to 40 ppm[†]
- **Convenient** – Easily performed on-site or in the lab
- **Accurate** – Results equivalent to HPLC methods

Applications

- Poultry Feed
- Swine Feed
- Cattle Feed
- Equine Feed
- Pet Food
- Barley

**after extraction*

† Using high range procedure

This procedure has been validated for a wide range of finished feeds, including pet food



The background of the slide is a close-up photograph of several ears of yellow corn. The corn cobs are partially covered by their green husks, which are slightly peeled back in some areas, revealing the bright yellow kernels. The lighting is soft, highlighting the texture of the corn and the vibrant colors of the husks and kernels.

[PRODUCTS]

Fumonisin Testing Solutions

FumoniTest™

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1008

FumoniTest is a quantitative method for the detection of fumonisin B₁, B₂, and B₃ in a variety of commodities by fluorometer, HPLC or UPLC. FumoniTest can be used in diverse locations, from the farm elevator to food processing quality control laboratories to government testing laboratories. FumoniTest is safe, fast, requires no special skills, and produces precise results at parts per million levels.

Benefits

- **Convenient** – For use with fluorometer, HPLC or UPLC
- **Comprehensive** – Tests for fumonisins B₁, B₂, and B₃
- **Durable** – Has a long shelf life
- **Versatile** – For use with a variety of samples
- **Quick** – Less than 15 minutes to isolate toxin*
- **Wide Range** – Detects levels as low as 0.016 ppm and as high as 5 ppm

**excluding preparation and extraction*

Applications

- Beer
- Corn
- Corn Meal
- Corn/Soy Blend
- Milo/Sorghum
- Popcorn
- Poultry Feed



FumoniTestTM WB

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1060

FumoniTest WB is a quantitative HPLC method that uses wide bore immunoaffinity columns for the detection of fumonisin mycotoxins B₁, B₂, and B₃ in a variety of commodities. With a total volume of 3 mL, FumoniTest WB allows for a faster flow rate preferred by many laboratories and is the ideal cleanup step for any HPLC or UPLC.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Comprehensive** – Total readings for fumonisins B₁, B₂, and B₃
- **Durable** – Long shelf life
- **Versatile** – For use with a variety of samples
- **Quick** – 15 minutes to isolate toxin*
- **Wide Range** – Detects levels as high as 10 ppm
- **Fast Flow** – Passes more volume over the column

**excluding preparation and extraction*

Applications

- Corn
- DDGs



Fumo-V test strips use the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure total fumonisin B₁, B₂, and B₃ at levels as low as 0.2 ppm and as high as 5 ppm. The single dilution sample preparation procedure saves time and materials, and the test strip develops in just 5 minutes.* Digital results are displayed on the Vertu Lateral Flow reader, eliminating the need for subjective visual interpretation.

Benefits

- **Fast Screening** – Results in 5 minutes*
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 0.2 ppm
- **Convenient** – Easily performed on-site or in the laboratory
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or transferred to a spreadsheet
- **Wide Range** – 0 to 10 ppm

*after extraction

Applications

- Corn
- Wheat





Ordering Information:
Cat. No. 176003952

Fumo-V AQUA test strips use the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure total fumonisin B₁, B₂, and B₃ levels as low as 0.2 ppm and as high as 100 ppm. Fumo-V AQUA eliminates the need for hazardous solvents using a water-based dilution-free extraction procedure that develops in just 5 minutes.* Results are displayed on the digital screen and may also be printed or transferred to Excel for storage and used as a vital quality assurance tool.

Benefits

- **Sustainable** – Safe, solvent-free testing
- **Fast Screening** – Results in 5 minutes*
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 0.2 ppm
- **Convenient** – Easily performed on-site or in the laboratory
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or downloaded to a computer
- **Wide Range** – 0 to 100 ppm

**after extraction*

Applications

- Corn



The image is a full-page background photograph. The top half shows a lush green field with a single tree on the right. The bottom half shows a body of water with green algae or duckweed floating on the surface. A semi-transparent white banner is positioned across the middle of the image, containing the text.

[PRODUCTS]

Glyphosate Testing Solutions

Glyphosate-V™

QUANTITATIVE STRIP TESTS

Ordering Information:
Grain Kit Cat. No. 176005233
Water Kit Cat. No. 176005232

Glyphosate-V is the world's FIRST lateral flow strip test designed for fully quantitative detection of glyphosate in cereal grains and water samples. Able to detect and measure total glyphosate at levels as low as 0.002 parts per million (ppm) in water, and 0.025 ppm in wheat and oats, Glyphosate-V delivers numeric results in just 15 minutes using the Vertu TOUCH reader, with optional data printing, storage and transfer USB or Vertu CONNECT enterprise software.

Benefits

- **Safe** – Eliminates toxic calibration chemicals
- **Simple** – Fewer steps, less hands-on time
- **Value** – No hidden costs or sample batching required
- **Rapid screening** – Actionable results in 15 minutes*
- **Sensitive** – Limits of detection as low as 0.002 ppm (water) and 0.025 ppm (grain)
- **Wide range** – Quantify levels as high as 0.5 ppm (water) and 2.0 ppm (grain)
- **Convenient** – Easily performed} on-site or in the lab
- **Accurate** – Results comparable to HPLC

Applications

- Cereal Grains
- Water



The background of the slide is a close-up, high-resolution photograph of numerous coffee beans. The beans are a rich, dark brown color with a glossy sheen, showing the characteristic S-shaped curve and central crease. They are densely packed, filling the entire frame. A semi-transparent white rectangular box is overlaid on the upper portion of the image, containing the text.

[PRODUCTS]

Ochratoxin Testing Solutions

OchraTest™

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. 13012

OchraTest is a quantitative method for the detection of ochratoxin A in a variety of commodities using a fluorometer, HPLC or UPLC. The test requires no special skills and is rugged enough for field or laboratory use. Designed for room temperature storage, OchraTest is safe, sensitive, and fast – enabling detection at parts per billion levels in just minutes.

Benefits

- **Convenient** – For use with fluorometer, HPLC or UPLC
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – Can be used with a variety of samples
- **Quick** – Less than 10 minutes to isolate toxin*
- **Wide Range** – Detects levels as low as 0.10 ppb and as high as 100 ppb
- **Easy** – No special skills required, test can be performed virtually anywhere
- **Safe** – Requires less toxic materials than other methods

**excluding preparation and extraction*

Applications

- Barley
- Beer
- Coffee
- Corn Meal
- Corn/Soy Blend
- Dried Fruit
- Green Coffee
- Poultry Feed
- Popcorn
- Roasted Coffee
- Soluble Coffee
- Spices
- Wheat
- Wine
- Tree Nuts



OchraTest™ WB

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1033

OchraTest WB is a quantitative method for the detection of ochratoxin A with LC and LC-MS/MS in a variety of commodities. Using wide bore immunoaffinity columns with a total volume of 3 mL, compared to 1 mL in VICAM's standard columns, OchraTest WB allows for a faster flow rate preferred by many laboratories and is the ideal cleanup step for any HPLC or UPLC.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – For use with a variety of samples
- **Quick** – 10 minutes to isolate toxin*
- **Wide Range** – Detects levels as low as 0.25 ppb and as high as 100 ppb
- **Fast Flow** – Passes more volume over the column

**excluding preparation and extraction*

Applications

- Coffee
- Corn
- Licorice
- Spice
- Wheat





Ordering Information:
Cat. No. 176004087

Ochra-V AQUA test strips use the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and quantify ochratoxin A in wheat, green coffee, and corn samples at levels as low as 2 ppb. The aqueous-based sample preparation procedure saves time and materials, and the test takes 5 minutes* to develop. Digital readings are clearly displayed on the screen of the Vertu Lateral Flow Reader, eliminating any guesswork about the results.

Benefits

- **Convenient** – Easily performed on-site or in the laboratory
- **Wide Range** – Detects levels as low as 2 ppb and as high as 30 ppb
- **Fast Screening** – Results in minutes
- **Safe** – Water-based extraction method

Applications

- Wheat
- Green coffee
- Corn

**after extraction*





[PRODUCTS]

T-2 and HT-2 Testing Solutions

T-2testTM LC

MYCOTOXIN TESTING SYSTEM

Ordering Information:

Cat. No. G1028

Using monoclonal antibody-based affinity chromatography, T-2test HPLC is a HPLC-only test for the detection of T-2 mycotoxin for customers in the food processing industry. An ideal cleanup step for any HPLC, T-2test HPLC is simple, reliable, and provides precise numerical results in parts per million levels – the preferred test of laboratories around the world for speed, quantification, and specificity.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Convenient** – Uses same methods as other VICAM tests
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – Can be used with a variety of samples
- **Wide Range** – Detects levels as low as 5 ppb and as high as 1500 ppb
- **Safe** – Requires less toxic materials than other methods

Applications

- Barley
- Corn
- Milo/Sorghum
- Oats
- Rice
- Wheat





Ordering Information:
Cat. No. 100000569

T2/HT2-V AQUA Strip Tests utilize the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure combined T-2 and HT-2 at levels as low as 10 parts per billion (ppb) and as high as 800 ppb. T2/HT2-V AQUA eliminates the need for hazardous solvents, using a water-based extraction procedure that requires no dilution step and develops in just 5 minutes. Results are displayed on the digital screen and may also be printed or transferred to a computer for storage and use as an integral quality assurance tool.

Benefits

- **Fast screening** – Results in 5 minutes
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 10 ppb
- **Convenient** – Easily performed on-site or in the lab
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or transferred to a spreadsheet
- **Wide Range** – 10-800 ppb

Applications

- Grains





[PRODUCTS]

Zearalenone Testing Solutions



ZearalaTest™

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1012

ZearalaTest is a monoclonal antibody-based affinity chromatography method for the detection of zearalenone mycotoxin at parts per million levels. Quantitative results can be obtained using a fluorometer, HPLC or UPLC. ZearalaTest provides grain and feed processors the sensitivity, simplicity, and speed they require to generate precise, on-time data.

Benefits

- **Convenient** – For use with fluorometer, HPLC or UPLC
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – For use with a variety of samples
- **Quick** – Less than 15 minutes to isolate toxin*
- **Wide Range** – Detects levels as low as 0.1 ppm (fluorometer) and as high as 9 ppm (HPLC)
- **Safe** – Requires less toxic materials than conventional methods

**excluding preparation and extraction*

Applications

- Corn
- DDG
- Milo
- Poultry Feed



ZearalaTest™ WB

MYCOTOXIN TESTING SYSTEM

Ordering Information:

Cat. No. G1026

ZearalaTest WB is designed for the rapid, precise detection of zearalenone using wide bore immunoaffinity columns. With 3 mL wide bore construction, ZearalaTest WB allows for a faster flow rate and is the ideal cleanup step for any HPLC or UPLC analysis.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC 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

**excluding preparation and extraction*

Applications

- Corn
- Milo
- Poultry Feed



Zearala-V AQUA test strips use the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure zearalenone at levels as low as 0.1 ppm and as high as 5.0 ppm. Zearala-V AQUA eliminates the need for hazardous solvents using a water-based dilution-free extraction. The sample preparation procedure saves time and materials, and the test strip develops in just 5 minutes.* Digital results are displayed on the VertuTM Lateral Flow reader, eliminating the need for subjective visual interpretation.

Benefits

- **Sustainable** – Safe, solvent-free testing
- **Fast Screening** – Results in 5 minutes*
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 0.1 ppm
- **Convenient** – Easily performed onsite or in the lab
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or downloaded to a computer
- **Wide Range** – 0.1 to 5.0 ppm

■ Applications

- Corn

**after extraction*





[PRODUCTS]

Multi-Analyte Testing Solutions



AflaOchraTM LC

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. G1017

AflaOchra HPLC is the only test that employs a single column to produce precise numerical results for both ochratoxin A and the aflatoxins B₁, B₂, G₁, and G₂ in a variety of commodities. AflaOchra HPLC is safe and simple. It can be performed in less than 30 minutes (excluding sample preparations and extraction) and requires only basic HPLC or UPLC skills.

Benefits

- **Exclusive** – For HPLC, UPLC, and LC-MS/MS use
- **Comprehensive** – Detects aflatoxins B₁, B₂, G₁, G₂, and ochratoxin A
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – Can be used with a variety of samples
- **Quick** – Less than 30 minutes to isolate toxins*
- **Wide Range** – Measures levels as low as 0.25 ppb and as high as 100 ppb
- **Safe** – Requires less toxic materials than other methods

**excluding preparation and extraction*

Applications

- Botanicals
- Spices
- Wheat
- Corn



AOZ™ LC

MYCOTOXIN TESTING SYSTEM

Ordering Information:

Cat. No. G1031

AOZ HPLC is a quantitative method for the simultaneous detection of aflatoxin, ochratoxin A (OTA), and zearalenone (ZEA) in several commodities. AOZ HPLC immunoaffinity columns simultaneously isolate aflatoxins B₁, B₂, G₁, G₂; OTA; and ZEA. Using HPLC, UPLC or LC-MS/MS for detection, this test produces precise numerical results in micrograms per kilogram (µg/kg) or parts per billion (ppb).

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Convenient** – Uses same methods as other VICAM tests
- **Comprehensive** – Detects aflatoxins B₁, B₂, G₁, G₂; ochratoxin A (OTA); and zearalenone (ZEA)
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – Can be used with a variety of samples
- **Wide Range** – Detects aflatoxin levels from 0.1 to 100 ppb; 0.25 to 100 ppb for OTA; and 5.0 to 1,000 ppb for ZEA

Applications

- Barley
- Corn
- Rice
- Wheat
- Rye
- Feed



DON-NIVTM WB

MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. 176002933

Monoclonal antibodies enable the DON-NIV WB immunoaffinity column to isolate DON and NIV simultaneously from a single sample extract. Its 3 mL, wide-bore construction delivers flow-through speed to this powerful sample preparation column. Coupled with LC for detection, DON-NIV WB doubles the productivity of traditional laboratory analysis for DON and NIV.

Benefits

- **High Recovery** – Over 90% for deoxynivalenol and nivalenol*
- **Exclusive** – Primarily for HPLC or UPLC use
- **Convenient** – Total readings for deoxynivalenol and nivalenol
- **Durable** – Long shelf life
- **Versatility** – For use with wheat and other commodities
- **Quick** – 15 minutes to isolate toxins**
- **Simple** – Easy-to-use procedure

**using procedure developed by VICAM*

***excluding preparation and extraction*

Applications

- Wheat



MYCO6in1⁺

LC/MS/MS
MYCOTOXIN TESTING SYSTEM

Ordering Information:
Cat. No. 100000176

MycO6in1⁺ columns for LC-MS/MS is a quantitative method that delivers fast, accurate and simultaneous determination of aflatoxins, ochratoxin A, fumonisins, deoxynivalenol, zearalenone, nivalenol, T-2, and HT-2 toxins. Samples are purified by the Myco6in1⁺ LC-MS/MS immunoaffinity column before being quantitated by LC or LC-MS/MS.

Benefits

- **Exclusive** – For use with LC-MS/MS, HPLC with PDA, fluorescence detector, and post-column derivatization, or UPLC with ACQUITY™ QDa™ Mass Detector
- **Accurate** – Meets European Committee for Standardization (CEN) criteria for mycotoxin analysis methods
- **Comprehensive** – Detects aflatoxins, deoxynivalenol and nivalenol, fumonisins, ochratoxin A, zearalenone, and T-2 and HT-2 toxins with one simple test
- **Convenient** – One sample, one pass through the column to detect multiple mycotoxins
- **Durable** – Long shelf life
- **Economical** – One test provides results for multiple toxins, saving time and materials

Applications

- Corn (Maize)
- Corn Flakes
- Maize Crackers
- Wheat



T-2/HT-2™ LC

MYCOTOXIN TESTING SYSTEM

Ordering Information:

Cat. No. 176000207

The T-2/HT-2 HPLC test combines VICAM's proven immunoassay technology with HPLC or UPLC to detect and measure both T-2 and HT-2 toxins. T-2/HT-2 HPLC streamlines sample cleanup and when used in conjunction with UV detection provides precise readings at ng levels. This simple, sensitive, and reliable LC-only test has a long shelf life and can be used with a variety of samples.

Benefits

- **Exclusive** – Specifically for HPLC or UPLC use
- **Convenient** – Uses same methods as other VICAM tests
- **Durable** – Long shelf life; requires no refrigeration
- **Versatile** – Can be used with a variety of samples
- **Wide Range** – Reliable readings of contamination levels ranging from 100* ng to 1,000 ng of T-2 and HT-2
- **Safe** – Requires less toxic materials than other methods

Applications

- Barley
- Corn
- Oats
- Rice
- Wheat

**lower limits may be achieved with other methods of detection*



T2/HT2-V™

QUANTITATIVE STRIP TESTS

Ordering Information:

Cat. No. 100000568

T2/HT2-V AQUA Strip Tests utilize the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure combined T-2 and HT-2 at levels as low as 10 parts per billion (ppb) and as high as 800 ppb. T2/HT2-V AQUA eliminates the need for hazardous solvents, using a water-based extraction procedure that requires no dilution step and develops in just 5 minutes. Results are displayed on the digital screen and may also be printed or transferred to a computer for storage and use as an integral quality assurance tool.

Benefits

- **Fast screening** – Results in 5 minutes
- **Simple** – No special training required
- **Sensitive** – Limits of detection as low as 10 ppb
- **Convenient** – Easily performed on-site or in the lab
- **Durable** – Long shelf life
- **Accurate** – Real-time data which can be printed or transferred to a spreadsheet
- **Wide Range** – 10-800 ppb

Applications

- Grains



Myco **5-in-1 PLUS** with Vertu TOUCH: Detect **SIX** mycotoxins with **ONE** extraction.

1

Weigh $5\text{ g} \pm 0.1\text{ g}$ finely-ground sample into Vertu PREP tube. Add 25 mL AQUA Premix to extraction tube.



2

Set Vertu PREP mixer for 30 seconds. Close the tube and twist to lock it on the mixer. The mixer will start automatically.



3

Filter the extract into a V Filter Cup for no more than 5 minutes.



Afla-V
Quantitative Mycotoxin

Ochra-V
Quantitative Mycotoxin

Fumo-V
Quantitative Mycotoxin

Zearala-V
Quantitative Mycotoxin

T2/HT2-V
Quantitative Mycotoxin

DON-V
Quantitative Mycotoxin

Pipette 100 μL of extract to the sample well on the strip at 1 drop/second.



Place the strip on a flat surface for 5 minutes.

While waiting for 5 min, prepare Vertu TOUCH calibration by scanning the corresponding Vertu TOUCH barcode for the specific mycotoxin kit and lot#.*



Place the strip inside the Vertu TOUCH (the round opening in first), then press [Start Measurement].



Place DON-V™ strip into the mini-incubator at 40 °C and close the lid. Incubate strip for 2-10 minutes. This can be started while doing the sample extraction and filtration.



Pipette 100 μL of extract to the sample well on the DON-V strip at 1 drop/second and wait for the strip to develop for 5 minutes, leaving it inside the incubator (40 °C).



Solvent-free extraction!

Eliminate the expense and environmental hazards of toxic organic solvents.

- Press [Print] to print the result.
- Press [Same Barcode] to run the next test using the same lot of strips.
- Press [Change Barcode] to change the method or lot of strips being used.

* Calibration only needs to be scanned once per lot. Instrument stores calibration.

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Try our Mycotoxins
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www.commodityregs.com

Technical Service and Support: email: techservice@vicam.com

www.vicam.com

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