

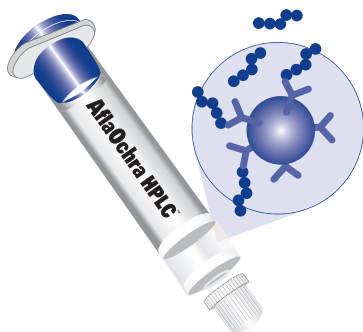


## Precise Numerical Results

Aflatoxin, a toxin from a naturally occurring mold is a Group 1 carcinogen proven to cause cancer in humans. Throughout the world, there are significant regulations on the presence of aflatoxins in food. The European Commission has action levels for aflatoxins in groundnuts, nuts, dried fruit, and cereals intended for direct human consumption or for ingredients in foodstuffs. These action levels are 4 ppb total aflatoxins and 2 ppb for aflatoxin B<sub>1</sub>.

Ochratoxin A is a mycotoxin produced by the fungus *Aspergillus ochraceus* and also by several species of *Penicillium*. Ochratoxin A has been known to cause kidney damage in animals and is a suspected carcinogen. Ochratoxin A is also commonly found in wine, baby food, raw and processed cereals, and dried vine fruits—all of which are regulated by European limits as low as 0.5 ppb. Known to cause kidney damage in animals and as a carcinogen, ochratoxin A finds its way into human and animal diets not only from EU-regulated commodities, but also from barley, oats, and sorghum.

AflaOchra™ HPLC from VICAM is the only test that employs a single column to produce precise numerical results in determining both aflatoxin and ochratoxin levels. Using monoclonal antibody based affinity chromatography, AflaOchra HPLC can isolate aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, and G<sub>2</sub> from grain, food, feed, and nuts and ochratoxin A and its stereoisomer from coffee, beer, grain, and feed. With AflaOchra HPLC you have the best of all worlds: sensitivity, simplicity, and speed—quick tests with results in parts per billion. In fact, no other test comes close for speed, quantification, and economy.



### BENEFITS

**Exclusive** – For HPLC, UPLC and LC/MS/MS use

**Comprehensive** – Detects aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, and G<sub>2</sub>, ochratoxin A and its stereoisomer

**Durable** – Long shelf life; requires no refrigeration

**Versatile** – Can be used with a variety of samples

**Quick** – Less than 10 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

### CULTIVATING SUCCESS THROUGH SCIENCE™:

#### EXTRACT SAMPLE

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

#### DILUTE AND FILTER

- Dilute extract
- Filter

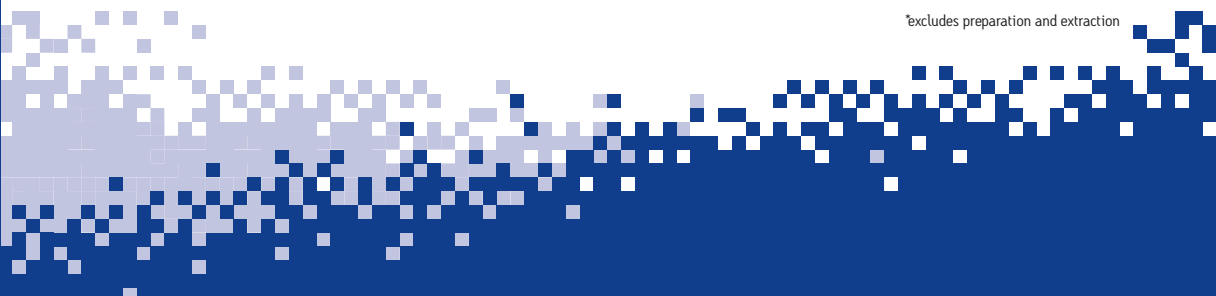
#### ABSORB AND ELUTE

- Pass filtrate over AflaOchra HPLC affinity column
- Wash column
- Elute aflatoxins and ochratoxin A and collect in a cuvette

#### MEASURE

- Inject eluate into HPLC
- Determine aflatoxins and ochratoxin A concentrations concentration

\*excludes preparation and extraction





## ORDERING INFORMATION

Cat. No.	Description	Cat. No.	Description
G1017	AflaOchra HPLC Columns, (25 per box)	23040	Vortex Mixer
G1118	WB Column Coupling	31955	Microfiber Filters, 1.5 µm, 11 cm (100)
G1124	Noniodized Sodium Chloride, (Salt, NaCl)	34010	Glass Syringe, 10 mL
20050	Graduated Cylinder, 50 mL	35016	Methanol, HPLC Grade (4 x 4 L)
20250	Graduated Cylinder, 250 mL	G1056	AflaOchra HPLC Kit (100 Columns and 1 set each standard)
20501	500 mL Bottle Dispenser for Methanol (0-3 mL range)		
20700	Wash Bottle, 500 mL		
21020	Single Position Pump Stand†		

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

Distilled, Reverse Osmosis, or Deionized Water

†Multiple position pump stands available

Subject to change without notice.

©2013 Waters Corporation. Waters and VICAM are registered trademarks of Waters Corporation. The Science of What's Possible, Cultivating Success Through Science and AflaOchra are trademarks of Waters Corporation.

The analytical methods presented in this data sheet have been researched and developed by VICAM to be used exclusively with AflaOchra HPLC products. These methods have been validated in the VICAM laboratories to perform to the specifications indicated in the AflaOchra HPLC procedures. The user assumes all risk in using AflaOchra HPLC procedures and products. VICAM makes no warranty of any kind, expressed or implied, other than that AflaOchra HPLC products conform to VICAM 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 AflaOchra HPLC products.

**Orders:**

1848 N Deffer Drive  
Nixa, MO 65714 USA  
Tel: +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 USA  
Tel: +1.800.338.4381  
+1.508.482.4935  
Fax: +1.508.482.4972  
[www.vicam.com](http://www.vicam.com)

72003558EN VW-POD