



**AOZ HPLC™** Affinity Column

## Precise Numerical Results

Aflatoxin, ochratoxin A (OTA), and zearalenone (ZEA) are toxins produced by naturally occurring molds and fungi. Aflatoxin is a Group 1 carcinogen proven to cause cancer in humans, while OTA and ZEA are suspected to cause disease in humans and animals.

The European Union limits aflatoxin B<sub>1</sub> to as low as 2 µg/kg and OTA to as low as 3 µg/kg, with even lower levels for foods specifically intended for infants and young children. OTA, a suspected carcinogen, causes kidney damage in humans, as well as livestock. Exposure to ZEA can cause reproductive problems including interference with conception, ovulation, and implantation in some animals, bringing this mycotoxin under increased scrutiny. Determination of aflatoxins, OTA, and ZEA previously required several, separate analyses, demanding considerable time and material.

AOZ HPLC™ from VICAM is the trusted test that employs a single column to simultaneously isolate aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, G<sub>2</sub>; OTA; and ZEA. Using a single monoclonal antibody-based immunoaffinity column and HPLC, this test produces precise numerical results in micrograms per kilogram (µg/kg) or parts per billion (ppb).

An ideal cleanup step for any HPLC, AOZ HPLC has a long shelf life, requires no refrigeration, and can be used with a variety of samples. The preferred test of laboratories around the world, no other test comes close for speed, quantification, and specificity.

### **Benefits:**

**Exclusive** – Specifically for HPLC use

**Convenient** – Uses same methods as other VICAM tests

**Comprehensive** – Detects aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, G<sub>2</sub>; 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 µg/kg; 0.25 to 100 µg/kg for OTA; and 5.0 to 1,000 µg/kg for ZEA

### **Here's How Simple AOZ HPLC is to Use:**

#### **Prepare Sample**

- Grind and weigh sample
- Add acetonitrile or methanol/water mixture

#### **Dilute and Filter**

- Filter
- Dilute extract

#### **Absorb and Elute**

- Pass diluted extract over AOZ HPLC affinity column
- Wash column
- Elute aflatoxins, ochratoxin A, and zearalenone and collect in cuvette

#### **Measure**

- Inject eluate into HPLC
- Determine aflatoxin, ochratoxin A, and zearalenone concentrations



## Ordering Information

Cat. No.	Description
G1031	AOZ HPLC™ Columns (25 per box)
G1113	10X Concentrate Phosphate Buffered Saline (PBS), 150 mL
G1114	10X Concentrate 0.01% Tween/PBS, 150 mL
G1118	WB Column Coupling (6)
G1130	Acetonitrile, HPLC Grade (4 x 4 L)
G4033	Micro-pipettor, 1 mL
20050	Graduated Cylinder, 50 mL
20100	Digital Scale with AC Adapter
20200	Blender with Stainless Steel, 1 qt. Blender Jar

Cat. No.	Description
20250	Graduated Cylinder, 250 mL
20656	Micro-pipette Tips for 1 mL Micro-pipettor (100)
20700	Wash Bottle, 500 mL
21020	Single Position Pump Stand†
31240	VICAM Fluted Filter Paper, 24 cm (100)
31955	Microfiber Filters, 1.5 µm, 11 cm (100)
35016	Methanol, HPLC Grade (4 X 4 L)
36010	Disposable Plastic Beakers (25 per pack)

†Multiple position pump stands available

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The analytical methods presented in this data sheet have been researched and developed by VICAM to be used exclusively with AOZ HPLC™ products. These analytical methods have been validated in the VICAM laboratories to perform to the specifications indicated in the AOZ HPLC procedures.

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