



CERTIFICATION

AOAC Research Institute *Performance Tested Methods*SM

Certificate No.

071801

The AOAC Research Institute hereby certifies the method known as

Reveal Q+ MAX[®] for Aflatoxin

manufactured by

Neogen Corporation

620 Lesher Place

Lansing, MI 48912 USA

This method has been evaluated and certified according to the policies and procedures of the AOAC *Performance Tested Methods*SM Program. This certificate indicates an AOAC Research Institute Certification Mark License Agreement has been executed which authorizes the manufacturer to display the AOAC Research Institute *Performance Tested Methods*SM certification mark on the above-mentioned method for the period below. Renewal may be granted by the Expiration Date under the rules stated in the licensing agreement.

A handwritten signature in black ink, appearing to read "Bradley A. Stawick".

Bradley A. Stawick, AOAC Research Institute Senior Director

Issue Date

February 01, 2026

Expiration Date

December 31, 2026

METHOD NAME

Reveal Q+ MAX® for Aflatoxin

CATALOG NUMBER

8088 (SKU 700002499)

ORIGINAL CERTIFICATION DATE

July 18, 2018

PRINCIPLE OF THE METHOD

Reveal Q+ MAX for Aflatoxin is a single-step lateral flow immunochromatographic assay based on a competitive immunoassay format. The extract is wicked through a reagent zone, which contains antibodies specific to aflatoxin conjugated to colloidal gold particles. If aflatoxin is present, it will be captured by the antibody-particle complex. The aflatoxin-antibody-particle complex is then wicked onto a membrane, which contains a zone of aflatoxin conjugated to a protein carrier. This zone captures any un-complexed antibody-particle, allowing the particles to concentrate and form a visual line (test line). As the level of aflatoxin in a sample increases, free aflatoxin in test extract will complex with the antibody-gold particles. This allows less antibody-gold to be captured in the test zone. Therefore, as the concentration of aflatoxin in the sample increases, the test line density decreases. Algorithms programmed into the readers convert these line densities into a quantitative result displayed in parts per billion (ppb). The membrane also contains a control zone where an immune complex present in the reagent zone is captured by a second antibody, forming a visible line (control line). The control line will always form regardless of the presence of aflatoxin, ensuring the strip is functioning properly.

CERTIFIED CLAIM STATEMENT: The Reveal Q+ MAX® for Aflatoxin is certified for the determination of total aflatoxins (aflatoxin B₁, aflatoxin B₂, aflatoxin G₁ and aflatoxin G₂) within the scope of Tables 1 and 2 and with the modification indicated in Table 3.

Certified method includes:

1. AccuScan Gold reader

Table 1. Method Performance Claims

Matrix	Test Portion	Extraction Solvent	Range, ng/g	Performance supporting certification			
				LOD, ng/g	LOQ, ng/g	Recovery, %	RSD _r , %
Corn	10 g	Water	5-300	<2-2.6	6.0-7.9	76.2-109	6.2-19.6
Almonds	10 g	Water	5-300	2.2	6.7	105-126	5.5-14.3
Pistachios	10 g	Water	5-300	2.2	6.5	74.6-109	5.0-15.6
Walnuts	10 g	Water	5-300	2.5	7.6	83.7-107	4.0-17.7
Peanuts	10 g	Water	5-300	2.7	8.0	72.2-105	3.3-13.7

Table 2. Method Selectivity

Compounds	Concentration	No. Target Compounds Reacting	No. Non-target Compounds Interfering	
			Non-detect corn	Corn containing 10 µg/kg aflatoxins
4 target aflatoxins ^a	10 µg/kg	4 ^b	NA ^c	NA
4 non-target mycotoxins ^d	10 mg/kg	NA	0	0

^a Comprising aflatoxin B₁, aflatoxin B₂, aflatoxin G₁ and aflatoxin G₂
^b Relative reactivities are aflatoxin B₁ (100%), aflatoxin B₂ (86%), aflatoxin G₁ (88%) and aflatoxin G₂ (54%).
^c NA = Not applicable
^d Comprising ochratoxin A, fumonisin B₁, zearalenone and neosalinol

Table 3. Method History

No.	Date	Summary	Supporting Data
1	July 2018	Original Certification	Certification Report
2	July 2021	Level 2 modification: Reduction in the inert filling agent in Max 1 powder	Modification 1 Report