

➔ AFLATOXIN & OCHRATOXIN SAMPLE PREPARATION COLUMNS



SIMULTANEOUS ANALYSIS OF AFLATOXINS AND OCHRATOXIN A - SAMPLE PREPARATION

Aflatoxins and Ochratoxin A are produced by fungi, e.g. *Aspergillus* and *Penicillium* species. Therefore both toxin types are found together in many foods and animal feeds, e.g. cereals. Thus it is appropriate to analyze one extract for the occurrence of both mycotoxins in a single step.

A significant assistance is the cleanup of extracts by a combined immunoaffinity column for both mycotoxin types in one step. The subsequent analysis may then be performed by HPLC with post-column derivatization or LC-MS.

Pickering Laboratories' combination sample preparation column Afla-OtaClean from LCTech provides an ideal immunoaffinity column. This combination column is very tolerant towards many matrices and allows for a comprehensive cleanup of the aflatoxins B1, B2, G1 and G2 as well as Ochratoxin A. The high maximum capacity of 150 ng for Aflatoxin B1 and Ochratoxin A provides a wide a measurement range.

MATRIX	B1	B2	G1	G2	OTA
Maize (Afla 10 ppb, OTA 14.3 ppb)	107 %	91 %	103 %	75 %	97 %
Rice (Afla 10 ppb, OTA 14.3 ppb)	107 %	93 %	98 %	85 %	101 %
Malt (Afla 10 ppb, OTA 14.3 ppb)	98 %	99 %	97 %	70 %	96 %
Raisins (Afla 10 ppb, OTA 14.3 ppb)	99 %	106 %	101 %	69 %	97 %

AFLATOXINS & OCHRATOXIN A ANALYSIS SAMPLE PREPARATION COLUMN CATALOG INFORMATION

CATALOG NO.	DESCRIPTION	QTY
1705-0005	Alfa-OtaClean sample prep column	25/pkg



SAMPLE PREPARATION COLUMN FOR AFLATOXIN ANALYSIS

The new Pickering Laboratory immunoaffinity column AflaCLEAN from LCTech was developed for the sample preparation of foods for the aflatoxin analysis using HPLC. With a maximum loading capacity of 100 ng Aflatoxin B1 and a selectivity against Aflatoxins B1, B2, G1 and G2. AflaCLEAN columns are available in the practical 3 mL polypropylene format.

MATRIX	B1	B2	G1	G2
Chili	116 %	117 %	121 %	92 %
Dates	108 %	96 %	116 %	72 %
Peanut Butter	95 %	98 %	93 %	84 %
Peanuts	114 %	113 %	102 %	91 %
Figs	115 %	104 %	110 %	74 %
Hazelnuts	98 %	100 %	95 %	83 %
Maize	101 %	98 %	103 %	80 %
Almonds	91 %	91 %	90 %	79 %
Pistachios	90 %	90 %	100 %	75 %
Rice	103 %	104 %	104 %	89 %
Cinnamon	87 %	85 %	86 %	87 %

AFLATOXIN ANALYSIS SAMPLE PREPARATION COLUMN CATALOG INFORMATION

CATALOG NO.	DESCRIPTION	QTY
1705-0003	AlfaClean sample prep column	25/pkg



➔ **SAMPLE PREPARATION COLUMN FOR
OCHRATOXIN ANALYSIS**

The new Pickering Laboratory immunoaffinity column OtaCLEAN was developed for sample preparation of food for the Ochratoxin A analysis using HPLC. The antibody employed possesses a very high Ochratoxin A specificity. This leads to exceptional chromatographic results without any interfering secondary signals and very high recovery rates. Independent of the complexity of the matrix, excellent results can be achieved.

HIGH RECOVERIES OF OCHRATOXIN A	
MATRIX	RECOVERY RATE
Beer	96 %
Cocoa	92 %
Coffee	100 %
Coffee Decaf	91 %
Duran Wheat	92 %
Grapes	91 %
Horse Feed	94 %
Instant Coffee	97 %
Liquorices	99 %
Malt	104 %
Nut Cream	91 %
Paprika	92 %
Pig feed	88 %
Raisins	96 %
Roast Coffee	101 %
Rice	90 %
Red Wine	108 %
Rye Bran	91 %
Wort	107 %

OCHRATOXIN A ANALYSIS SAMPLE PREPARATION COLUMN CATALOG INFORMATION		
CATALOG NO.	DESCRIPTION	QTY
1705-0004	OtaClean sample prep column	25/pkg

NOTE: The column is available in the practical 3 mL polypropylene format



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