

# Matrix of the Month

October, 2013:  
**Ochratoxin A  
in Sunflower Seeds**



Do you have a special matrix that we should test for mycotoxins?  
Please let us know and write an e-mail to [info@LCTech.de](mailto:info@LCTech.de)!

## Protocol

20 g sample are extracted with 2 g NaCl in 100 mL 80/20 methanol/water with 50 mL n-hexane (10 min) and then filtrated.

The filtrate (2 mL) is diluted with 12 mL PBS buffer with 8% Tween20 and completely added onto the immunoaffinity column OtaCLEAN.

The column is washed with 10 mL water, dried and eluted with 2 x 1 mL methanol. The first milliliter methanol should incubate on the column bed for 5 minutes to be sure that the antibody is entirely denaturated.

## HPLC Conditions

HPLC: Dionex Ultimate 3000 isocratic

Column oven: 40 °C

Separation column: RP C18

Flow rate: 0.6 mL/min (40/55/5) (water/methanol/acetonitrile (v/v/v) + 0.1% acetic acid)

Excitation wavelength: 335 nm

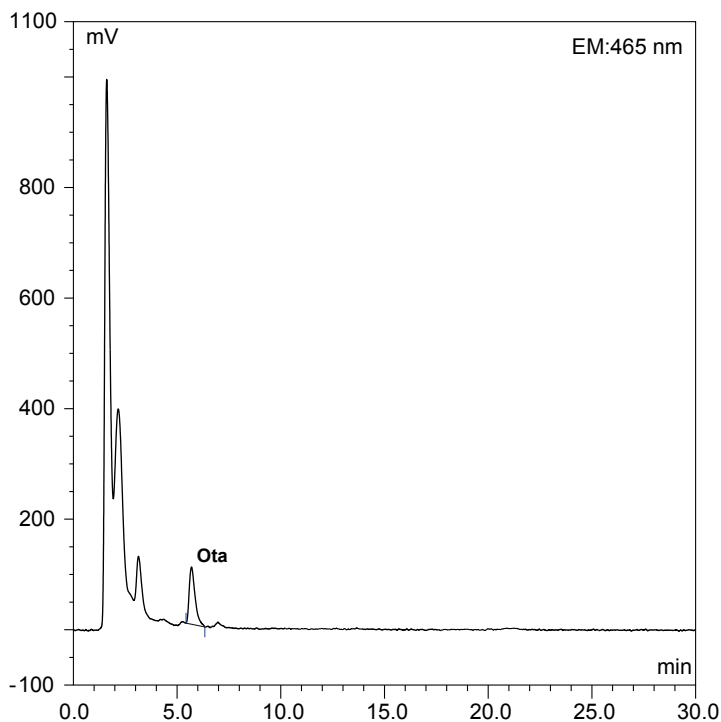
Emission wavelength: 465 nm

## Recovery Rate

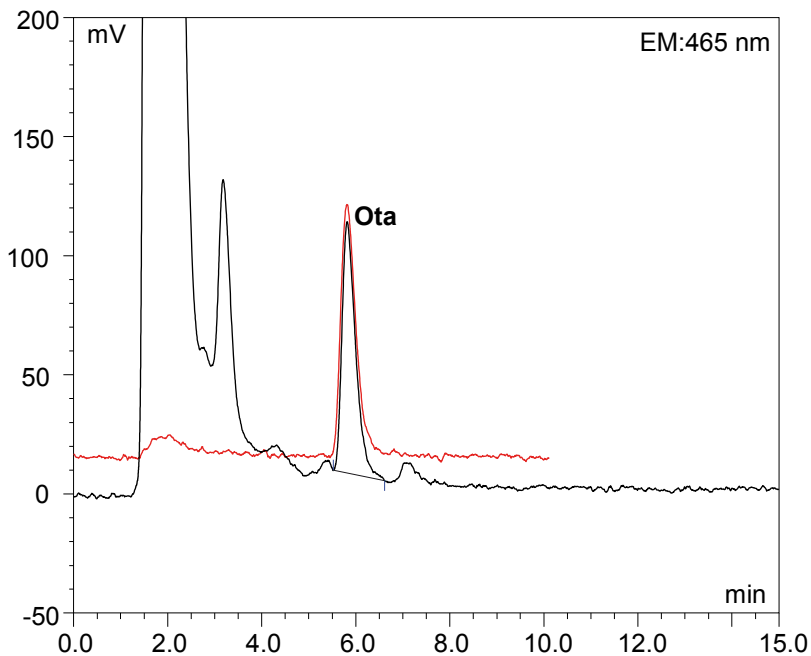
Content of Ochratoxin A in sunflower seeds	
	Ochratoxin A
Standard*	100
Recovery rate** sunflower seeds, spiked with 10 ppb	89

\* Standard is set = 100 % , \*\* corrected with non-spiked sample

Sunflower seeds (OTA without post column derivatisation), spiked with 10 ppb



Overlay



This LCTech product was used:

OtaCLEAN,  
Immunoaffinity column  
for Ochratoxin A

P/N 10515

Do you have further questions?  
Please simply write an e-mail to [info@LCTech.de](mailto:info@LCTech.de)