

AflaOchraStar™

Immunoaffinity column
Item no. 10006167

Mycotoxins



Intended use:

AflaOchraStar™ immunoaffinity columns contain monoclonal antibodies against aflatoxin B1, B2, G1 and G2 and ochratoxin A, which are covalently bound to gel-particles and are intended for the analysis of various commodities (e.g. corn, wheat, feed, spices).

Recommended solvents and buffers:

- Extraction solution: 80/20 (v/v) methanol/water or 84/16 (v/v) acetonitrile/water or 60/40 (v/v) acetonitrile/water (all HPLC grade)
- Dilution: PBS-buffer (10 mM)

PBS-buffer:

- 8 g NaCl, 1.2 g Na₂HPO₄, 0.2 g KH₂PO₄, 0.2 g KCl (p.A.)
- dissolve in 990 mL distilled or deionized water
- adjust pH to 7.4 using NaOH (1 M) or HCl (1 M)
- fill up to 1000 mL with distilled or deionized water
- Rinse solution: distilled water or deionized water or PBS-buffer (10 mM)
- Eluent: 98/2 (v/v) methanol/acetic acid (HPLC grade)

All solvents and buffers should be at room temperature (15 – 25 °C).

Romer Labs recommends the use of Biopure™ isotope labeled internal standards.

Storage:

Always store at 2 – 8 °C (35 – 46 °F) when not in use.
Do not freeze. Do not use the IAC beyond the expiration date.

IMPORTANT: Download certificate of analysis by scanning the QR code on the external label or by visiting <https://www.romerlabs.com/en/customer-resources/>

Special Notes for column use:

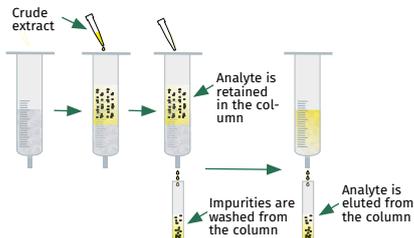
- StarLine™ IAC contain sodium azide.
- StarLine™ IAC are designed for single use only.
- Application notes for the use of StarLine™ IAC have been developed by Romer Labs and are available on request.

Disclaimer/Warranty:

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Procedure

1 Extraction

- Weigh 25 g of a representative ground sample (0.5 mm) into a suitable container.
- Add 100 mL of extraction solution (e.g. 80/20 (v/v) MeOH/H₂O).
- Shake for 1 hour on an orbital or gyratory shaker.
- Centrifuge or filter the supernatant through qualitative filter paper.
- Liquid samples can be diluted directly with PBS or mixed with solvent to obtain the appropriate ratios of the reagent used.

2 Dilution

- Dilute the extract with PBS until the content of methanol is not higher than 20% (v/v). For acetonitrile extracts the content of AcN can be up to 10% (v/v).
- Check pH and adjust with NaOH to 6 – 8.

3 Sample Application

- The IAC must be at room temperature (15 – 25 °C) for usage!
- It is not necessary to rinse the IAC before applying the extract!
- Apply the diluted extract to the IAC.
- Let all extract pass through the IAC at a flow rate of approx. 1 – 3 mL/min.

4 Rinse

- Rinse the IAC with 2 x 10 mL PBS at a flow rate of 1 – 3 mL/min.
- Remove liquid from the column by applying pressure to the top or vacuum

5 Elution

- Place a suitable vial under the AflaOchraStar™ IAC.
- Use 1.5 – 3.0 mL of 98/2 (v/v) methanol/ acetic acid for the elution of bound aflatoxins and ochratoxins; the eluent should be applied to the column in several small portions (e.g. 3x0.5 mL)!
- Leave the eluent on the column for a few seconds before starting elution to allow intensive contact with the gel.
- Remove any remaining liquid from the IAC by applying pressure at the top or vacuum at the bottom.
- In case of low level contamination the eluent can be dried down and re-dissolved in a small portion of mobile phase (use silanized glassware).
- Inject

to the bottom. The column must not dry out completely!

You can find worldwide contact information and learn more about our complete line of products for mycotoxin testing on our website.