

MultiStar™

Immunoaffinity column
Item no. 10005407

Mycotoxins



Intended use:

MultiStar™ immunoaffinity columns contain monoclonal antibodies against aflatoxins, ochratoxin, zearalenone, deoxynivalenol, fumonisins, T-2 and HT-2 toxin, which are covalently bound to gel-particles and are intended for the analysis of various commodities.

Recommended solvents and buffers:

- Extraction solution: 25/25/50 (v/v/v) methanol/acetonitrile/water (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: 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.

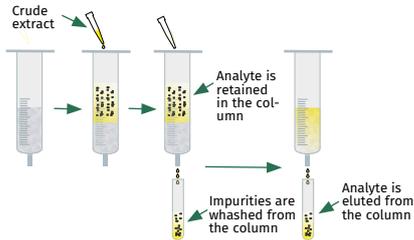
IMPORTANT: Download certificate of analysis by scanning the QR code on the external label or by visiting <https://www.romerlabs.com/en/customer-resources/>

Special Notes for column use:

- StarLine™ IAC contain sodium azide.
- StarLine™ IAC are designed for single use only.

Disclaimer/Warranty:

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Procedure

1 Extraction

- Weigh 5 g of a representative ground sample (0.5 mm) into a suitable container.
- Add 40 mL of extraction solution (e.g. 25/25/50 (v/v/v) methanol/acetonitrile/water).
- Blend at high speed for 3 minutes or shake for 1 hour on an orbital or gyratory shaker.
- Centrifuge or filter the supernatant through qualitative filter paper.

2 Dilution

- Dilute 0.8 mL of the extract (equivalent to 0.1 g sample) with 10 mL PBS.
- When bigger volumes are analyzed dilute until the contents of acetonitrile and methanol do not exceed 15%.

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 with a flow rate of approx. 1 – 3 mL/min.

4 Rinse

- Rinse the IAC with 5 mL PBS at a flow rate of 1 – 3 mL/min.
- Remove liquid from the column by applying pressure to the top or vacuum to the bottom. The column must not dry out completely!

5 Elution

- Place a suitable vial under the MultiStar™ IAC.
- Use 3.0 mL of 98/2 (v/v) methanol/ acetic acid for the elution of bound mycotoxins; the eluent should be applied to the column in several small portions (e.g. 3x1.0 mL)!
- Leave the eluent on the column for a few seconds before starting elution to allow intensive contact with the gel. The flow rate should not exceed 1 mL/min.
- 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.
- Inject

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