T2/HT2Star™ R

Immunoaffinity column
Item no. 10001977

Mycotoxins

Intended use:

T2/HT2Star™ R immunoaffinity colums contain monoclonal antibodies against T-2 toxin and HT-2 toxin, which are covalently bound to gel-particles and are intended for the analysis of various commodities (e.g. maize, wheat, barley, oats, rye).

Recommended solvents and buffers:

- Extraction solution: 80/20 (v/v) methanol/water (HPLC grade) + 1 g NaCl
- Dilution: PBS-buffer (10 mM)
  PBS-buffer:
  8 g NaCl; 1.2 g Na_2HPO_4; 0.2 g KH_2PO_4; 0.2 g KCl (all p.A. quality), dissolve in 990 mL of distilled or deionized water and 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: acetonitrile (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.

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.

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/

Romer Labs®
Making the World's Food Safer

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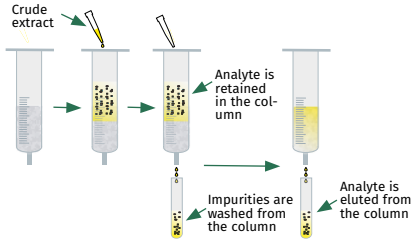

Procedure

1 Extraction

- Weigh 25 g of a representative ground sample (0.5 mm) into a suitable container.
- Add 1 g of NaCl and 100 mL of extraction solution (e.g. 80/20 (v/v) methanol/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.
- Liquid samples can be diluted directly with PBS or mixed with solvent to obtain the appropriate ratios of the reagent used (e.g. if using 80/20 MeOH/H_2O (v/v): 0.4 mL of sample and 1.6 mL of MeOH).
- Any solvent content in the sample must be considered in the calculation of the dilution.

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 5 % (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 with a flow rate of approx. 1 – 3 mL/min.

4 Rinse

- Rinse the IAC with 2x10 mL distilled water, deionized water or 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 T2/HT2Star™ R IAC.
- Use 3.0 mL of acetonitrile for the elution of bound T-2 and HT-2 toxins; 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.
- 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, derivatized (add 50 µL 4-dimethyl-aminopyridine (DMAP) and 50 µL 1-anthroylnitrile, vortex 1 min and heat at 50 °C (122 °F) for 15 min) 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.

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