

r-biopharm®



RIDA® Aflatoxin column

REF R5001 / R5002

Immunaффinitätssäulen für die Probenvorbereitung
zum Nachweis von Aflatoxin

Immunoaffinity column for sample clean up prior to
analysis of aflatoxin

Lagerung bei 2 - 8 °C
Storage at 2 - 8 °C (36 - 47 °F)



R-Biopharm AG, An der neuen Bergstraße 17, 64297 Darmstadt, Germany

Phone: +49 (0) 61 51 81 02-0 / Fax: +49 (0) 61 51 81 02-20

Für weitere Fragen stehen Ihnen gerne zur Verfügung:

Please contact for questions and further information:

R-Biopharm AG Zentrale

Tel.: +49 (0) 61 51 - 81 02-0

Auftragsannahme

Fax: +49 (0) 61 51 - 81 02-20

E-Mail: orders@r-biopharm.de

Marketing & Vertrieb

E-Mail: info@r-biopharm.de

R-Biopharm AG switchboard

Phone: +49 (0) 61 51 - 81 02-0

Order department

Fax: +49 (0) 61 51 - 81 02-20

E-mail: orders@r-biopharm.de

Marketing & sales

E-mail: sales@r-biopharm.de

RIDA[®], RIDASCREEN[®] und RIDASOFT[®]
sind eingetragene Marken der R-Biopharm AG.
Hersteller: R-Biopharm AG, Darmstadt, Deutschland

R-Biopharm AG ist ISO 9001 zertifiziert.

RIDA[®], RIDASCREEN[®] and RIDASOFT[®]
are registered trademarks of R-Biopharm AG.
Manufacturer: R-Biopharm AG, Darmstadt, Germany

R-Biopharm AG is ISO 9001 certified.

RIDA® Aflatoxin column

Brief information

RIDA® Aflatoxin column (Art. No. R5001 / R5002) are immunoaffinity columns for sample clean up prior to analysis of aflatoxins B₁, B₂, G₁, G₂ in food (see chapter 1. Intended use).

R5001 contains 10 immunoaffinity columns for single use.

R5002 contains 50 immunoaffinity columns for single use.

Gel suspension: sepharose

Antibody: monoclonal antibody conjugated to sepharose

Flow rate: 1 drop/s

Capacity of the column: approx. 40 ng aflatoxin

1. Intended use

RIDA® Aflatoxin columns are usable in combination with enzyme immunoassays (e.g. Art. No. R4701, RIDASCREEN® Aflatoxin Total or Art. No. R1211, RIDASCREEN® Aflatoxin B1 30/15) for the quantitative determination of aflatoxins B₁, B₂, G₁, G₂.

The sample preparation with the immunoaffinity columns simplifies and enhances the sample clean up procedure. Pure extracts are obtained, which can be analyzed by different analytical methods.

2. Purification by immunoaffinity column

The basis is the antigen-antibody reaction.

The column contains a gel suspension to which monoclonal antibodies are attached covalently. The antibodies are specific for the aflatoxins B₁, B₂, G₁, G₂.

- A: The sample extract is applied and is passed through the column. If aflatoxins are present in the sample, they will be bound by the monoclonal antibodies.
- B: All other substances will not be retained on the column.
- C: Using methanol as eluent the aflatoxins will be released from the antigen antibody complex. Methanol causes a denaturation of the antibodies. Therefore, the antigen (aflatoxin) is set free and can be eluted.

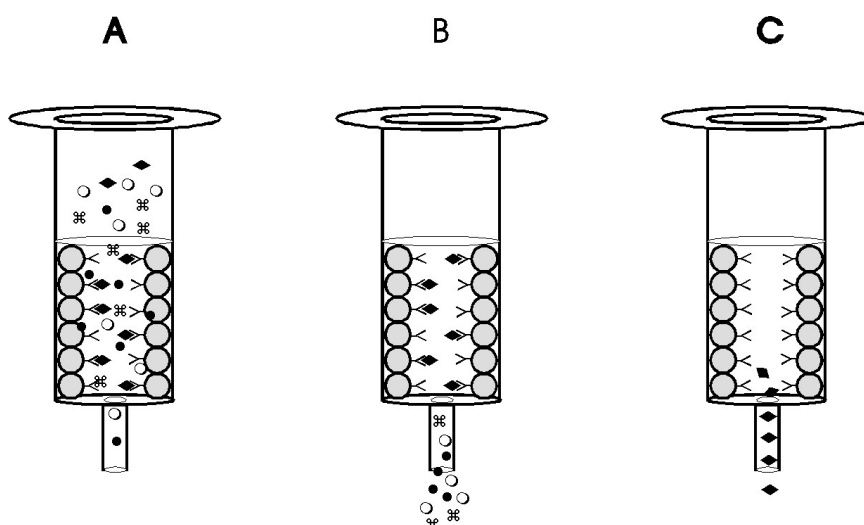


Fig. 1: Principle of an immunoaffinity column

3. Reagents provided

With the immunoaffinity columns 10 or 50 sample clean-ups respectively could be done (one sample clean-up per column). Each test kit contains:

Component	Format	Amount
Immunoaffinity column	Ready to use	10 columns (R5001) 50 columns (R5002)

4. Equipment / Reagents required but not provided

4.1 Equipment

- Gloves
- Stand / holder for columns (e.g. Immunoaffinity Column Rack, Art. No. RBRCR1);
- Immunoaffinity Column Accessory Pack (contains glass barrels, syringes and adapters, Art. No. RBRAP01);
alternatively one way plastic pipette tips (5 or 10 mL, as sample reservoir)
- Graduated pipettes
- Variable 20 - 200 μ L and 200 - 1000 μ L micropipettes

4.2 Reagents

- Methanol p.a.
- Distilled water (dist. water) or deionized water

5. Warnings and precautions for the users

This kit should only be used by trained laboratory personnel. The instruction for use must be strictly followed.

Methanol is harmful to health. It should be worked under a chemical hood. Aflatoxin is a toxic and carcinogenic substance. Particular care should be taken. Avoid contact with the skin (use gloves).

Decontamination of the glassware and toxin-content solutions is best carried out using a sodium hypochlorite (bleach) solution (10 % (v/v)) overnight (adjust solution with HCl to pH 7).

This kit may contain hazardous substances. For hazard notes on the contained substances please refer to the appropriate material safety data sheets (SDS) for this product, available online at www.r-biopharm.com.

All reagents and materials must be recovered or disposed after use at customers own responsibility according to the protection of human health and

the environment. Please observe the applicable national regulations concerning waste disposal (e.g. Waste Management Act, Regulations on Dangerous Chemicals, etc.).

6. Storage instructions

Store the kit at 2 - 8 °C (35 - 46 °F). Do not freeze columns.

Return any unused columns to their original foil bag and further store at 2 - 8 °C (35 - 46 °F).

Do not use the kit after the expiration date (see kit label).

7. Sample preparation

The samples should be stored in a cool place, protected against light.

Aflatoxin is light sensitive, therefore, avoid exposure of the samples and sample extracts to direct light.

R-Biopharm can provide you different applications for RIDASCREEN® Aflatoxin Total (Art. No. R4701) and RIDASCREEN® Aflatoxin B1 30/15 (Art. No. R1211) in combination with RIDA® Aflatoxin column upon request. **Please contact your local distributor or sales@r-biopharm.de.**

8. Separation with RIDA® Aflatoxin column

8.1 Preparation

Bring all reagents to room temperature (20 - 25 °C / 68 - 77 °F) before use.

Unused columns should be stored in the original foil bag at 2 - 8 °C (35 - 46 °F) when no longer required.

Note

The columns are delivered without an adapter for sample reservoir see chapter 4. Equipment /Reagents required but not provided).

The columns are plugged with caps on top and tip, which have to be removed prior to use. The storage buffer above the gel is rinsed off within the first washing step.

The columns must not dry up during usage.

Excessive pressure on the column may cause compression of the gel and consequently low recoveries.

8.2 Procedure (clean up)

Do not let the columns dry up, especially during sample filling and washing.

Note

Follow the instructions for sample preparation and clean-up (instruction for use/application note/recommendation) for the specific test kits and matrices in combination with RIDA® Aflatoxin column (not included in the kit). In case of deviations from the following general procedure, matrix-related instructions must be followed.

1. Let the storage buffer flow out until the upper edge of the column bed.
2. Rinse the column with 2 mL distilled water.
3. Fill the column with prepared particle free extract (see instructions).
(Recommendation: Attach suitable adapter on top of the column and use syringe as sample reservoir.)
4. Pass the sample extract through the column (flow rate: approx. 1 drop/s). Discard passed solution.
5. Wash the column with 10 mL distilled water and remove water residues by pressing air. Discard passed solution.
6. Place a clean and closable vial directly below the column and elute the column with 100 % methanol (see instructions). Press air thoroughly through the column to collect all eluate residues.
(Remark: backflushing of methanol is recommended. If the eluent passed too fast (faster than 10 s), collect the eluate and pass it again through the column.)
7. Process the eluate containing the toxin according to the instructions.
8. Use 50 µL of the purified sample extract per well in the assay.

9. Application notes and recommendations

Application notes and recommendations are available on request.

For further product information and applications, please contact your local distributor or R-Biopharm at this address: sales@r-biopharm.de.









Version overview

Version number	Chapter and title
----------------	-------------------

2003-06-30	Release version
2014-07-03	General revision
2022-09-20	<p>Current version</p> <p>General revision</p> <p>Changes made:</p> <ul style="list-style-type: none"> – Chapter titles adapted to product – Updating chapter content: <ul style="list-style-type: none"> – 4. Equipment / Reagents required but not provided – 5. Warnings and precautions for the users – 7. Sample preparation – 8. Separation with RIDA® Aflatoxin column – Chapter 9. Detection and quantification removed and replaced by 9. Application notes and recommendations

Explanation of symbols

General symbols:

	Follow the instructions for use
	Batch number
	Expiry date (YYYY-MM)
	Storage temperature
	Article number
	Number of test determinations
	Manufacturing date (YYYY-MM)
	Manufacturer + address

Disclaimer

The user assumes all risk in using R-Biopharm AG's products and services.

R-Biopharm AG will warrant that its products and services meet all quality control standards set by R-Biopharm AG, and R-Biopharm AG will, at its option, replace or repair any components, product or repeat services which prove to be defective in workmanship or material within product specific warranty periods or expiration dates and which our examination shall disclose to our satisfaction to be defective as such.

This warranty is expressly in lieu of all other warranties, expressed or implied, as to quality, description, fitness for any particular purpose, merchantability, productiveness, or any other matter. R-Biopharm AG shall be in no way responsible for the proper use of its products and hereby disclaims all other remedies, warranties, guarantees or liabilities, expressed or implied, arising by law or otherwise, and it shall have no liability for any lost profits or damage, direct, indirect or otherwise, to person or property, in connection with the use of any of its products or services.

This warranty shall not be extended, altered or varied except by a written instrument signed by an authorized representative of R-Biopharm AG.

R-Biopharm AG

Postanschrift / Postal Address:

An der neuen Bergstraße 17

64297 Darmstadt, Germany

Sitz / Corporate Seat: Pfungstadt

Tel.: +49 (0) 61 51 - 81 02-0

Fax: +49 (0) 61 51 - 81 02-40

E-mail: info@r-biopharm.de

www.r-biopharm.com

Vorsitzender des Aufsichtsrats /

Chairman of Supervisory Board:

Dr. Ralf M. Dreher

Vorstand / Board of Management:

Christian Dreher (Vorsitzender / Chairman),

Dr. Hans Frickel, Jochen Hirsch,

Ute Salzbrenner, Dr. Peter Schubert

Handelsregister / Commercial Register:

Amtsgericht Darmstadt HRB 8321