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**New**

## RIDASCREEN® $\beta$ -Agonists – New Screening Method for the Quantification of $\beta$ -Agonists

$\beta$ -agonists are known to be effective performance enhancers in animal production; however, the use of these substances for fattening purposes is prohibited within the European Union.

R-Biopharm has developed a fast and simple screening method for the detection of  $\beta$ -agonist residues called:

RIDASCREEN®  $\beta$ -Agonists (Art. No.:

R1703).

Compared with the already available RIDASCREEN® Clenbuterol assays, the new system has 100 % cross-reactivity to clenbuterol and salbutamol. It is also able to detect other important members of the  $\beta$ -agonist group,

including brombuterol, bromchlorbuterol, mabuterol, terbutaline, clenproperol, and cimaterol. RIDASCREEN®  $\beta$ -Agonists is a competitive enzyme immunoassay for the quantitative analysis of  $\beta$ -agonists in:

Urine

Serum

Meat

Feed

Urine and serum samples can be implemented directly into the assay. Simple and rapid extraction methods have been developed for meat and feed samples. The test results are available within 60 minutes.

Further important specifications are described in the following table.

### Specifications of the RIDASCREEN® $\beta$ -Agonists test

Art. No.	R1703
Test format	Microtiter plate with 96 wells
Measurement range	0.25 - 25 ppb
Sensitivity – Limit of detection (LOD)	350 ng/kg (ppt) in urine 250 ng/kg (ppt) in serum 300 ng/kg (ppt) in meat 900 ng/kg (ppt) in feed
Recovery	80 - 100 % depending on the matrix

## New products

### Lumitester PD-20: ATP/AMP Measuring Device

The Lumitester PD-20 (manufactured by Kikkoman, Japan) will be marketed by R-Biopharm starting immediately!

This handy portable device allows the user to take and store up to 2000 hygiene monitoring measurements and later transfer the data to a PC. Subsequent data processing can be performed using spreadsheet software such as Microsoft Excel.

Measurements are performed using the LuciPac Pen, a specially designed ATP test tube. The swab stick is first removed from the test tube container and used to swab the test surface. The swab is then re-inserted and pushed down to the bottom of the test tube, causing it to be exposed to the reaction liquid and the actual

reagent. The tube is then shaken gently to allow the reaction liquid to collect in the reaction chamber of the tube. Subsequently, the whole LuciPac Pen is inserted into the measuring chamber of the Lumitester PD-20. The measurement process is then started. The results are obtained within 10 seconds and are displayed in relative light units (RLU).

Because an integrated AMP recycling system is incorporated in the reaction, the Lumitester PD-20 and LuciPac Pen system not only measures the amount of ATP present, but can also detect adenosine monophosphate (AMP), which is a much more stable substance. This additional measurement capability increases the sensitivity of measurement substantially, especially in production areas in which highly processed foodstuffs are processed.



- **Lumitester PD-20 (ZLT-1002652)**  
Luminometer for AMP/ATP measurement using the LuciPac Pen
- **LuciPac Pen, 100 pieces (ZLP-1002667)**  
Bioluminescence system for surface hygiene monitoring; supplied as reaction tubes with an integrated swab for use with the Lumitester PD-20 luminometer.

## Our products

### RIDASCREEN® Gliadin product line – the used R5 antibody shows no cross-reactivity to soy based products

Genetic-pure soy is gluten-free. However, often soy is slightly contaminated with gluten (e.g. wheat, rye or barley).

This unintended contamination can take place during processing (e.g. shared equipment of gluten-free and gluten-containing foods during milling) or simply by airborne dust during storage or transportation.

Therefore, it is necessary to handle soy from farm to fork with care in order to avoid unwanted contamination.

Different studies and investigations to show that the R5-antibody has no cross-reactivity to soy or soy-containing products were performed in the laboratory of Prof. Dr. Enrique Mendez (Proceedings of the 21<sup>st</sup> Meeting of Working Group on Prolamin) as well as at the R&D department of R-Biopharm.

For these studies

- different kinds of soy products at different production stages (from the soy beans to the final processed products) were tested using different extraction methods
- gluten-free soy samples were spiked
- analytical methods for gluten analysis (e.g. PCR, MALDI-TOF and Western Blot) were used

As an example, a comparison of RIDASCREEN® Gliadin with SureFood® Allergen Gluten (S3106, CONGEN) for “soy cheese” containing soy flour, palm oil, salt and flavours showed consistent results (see table). Therefore it can be concluded that this soy cheese is contaminated with wheat.

## Comparison of soy cheese samples tested with ELISA and PCR

Food matrices	RIDASCREEN® Gliadin Cocktail extraction Gliadin mg/kg (ppm)	PCR Gluten	PCR Wheat
soy cheese 1	49.9	pos.	pos
soy cheese 2	39.6	pos.	pos.
LOQ	2.5		
LOD	1.5	theor. 5 DNA copies	theor. 5 DNA copies

The results of these validations clearly demonstrate that the R5 antibody used in the RIDASCREEN® Gliadin (R7001), the RIDASCREEN®FAST Gliadin (R7002) and the RIDA®QUICK Gliadin (R7003) tests show no cross-reactivity to soy or soy containing

products contrary to statements made on competitors marketing materials.

The corresponding validation data is available on request (contact [info@r-biopharm.de](mailto:info@r-biopharm.de)).

## RIDASCREEN®FAST Folsäure (Folic acid) – New application

For the RIDASCREEN®FAST Folsäure (Folic acid) test (R3202) a new application for enriched flour is available. The new application uses a flour sample processing method that differs from the one described in the product information, and it should be used instead

of this method. We will revise the product information accordingly during the next revision.

The corresponding validation data is available on request (contact [info@r-biopharm.de](mailto:info@r-biopharm.de)).

## Information from R-Biopharm Rhône, Scotland

### DZT MS-PREP®

There has been a lot of interest following the launch of the new DZT MS-PREP® columns for use with LC-MSMS. Fusarium toxins are of importance worldwide and it is not uncommon for high levels of these toxins to be present in cereal and feed. Analysts are currently looking for improved ways to analyse these toxins in order to improve sensitivity and detection, particularly for more complex cereal products and baby foods.

Japan is about to undertake a national survey in order to look at the impact of DON, ZON

and T2 and HT-2 on human health and in Europe work is already underway to look for suitable methods of analysis for these toxins in a range of food commodities. Already a number of official and private laboratories are starting to use DZT MS-PREP® columns for routine testing of complex foods and feed. R-Biopharm Rhône (RBR) plan to continue to development new methods for analysis of DON, ZON and T2 and HT-2 in more difficult, complex and pigmented commodities.

### Discontinuation of Spectate

Due to continuing problems and delays with the supply of reagents and items used in Spectate, R-Biopharm Rhône Limited has taken the decision to discontinue this product from our range. The decision has been taken following much deliberation, given that we have marketed the product for many years; however it has become difficult to guarantee the consistent supply and availability of this

product to our customers. Consequently, we have no choice but to take the decision to delete the product from our offering.

We hope that you understand and agree with our decision. Unfortunately we have no replacement product at this time and we apologize for any inconvenience that this may cause.

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Munich  
23. - 26.03.2010  
Hall A3,  
Booth 404

r-biopharm



## AFLAOCHRA PREP®

With plans to introduce legislation for ochratoxin A in spices added to legislation, already in existence for aflatoxins in spices, there is a need for one extraction, analytical and detection method for both toxins in this commodity. The new AFLAOCHRA PREP® columns have already been proven to work satisfactorily for the simultaneous detection of aflatoxins and ochratoxin A in a wide range of spices

in conjunction with HPLC or with LC-MSMS. The new columns reduce sample preparation, saving both time and money. A poster showing recoveries of 80 - 100 % for total aflatoxin and ochratoxin A with AFLAOCHRA PREP® in different spices with HPLC is available on request along with application notes detailing the extraction method and HPLC conditions.

## Promotion of AFLAPLATE® for use with animal feed and spices

As a result of Directive 2002/32/EC, which lays down maximum levels for aflatoxins B1 in feed materials, there is a need in the market for a quantitative screening test for analysis of aflatoxin B1 particularly in feed. AFLAPLATE® is already used successfully in several countries for analysis of animal feed and has been found to offer excellent results comparable

with HPLC. Application notes are available for complex feed matrices using pre-clean up with the aflatoxin solid phase columns (P25) to remove pigments prior to quantification of aflatoxin B1 using AFLAPLATE®. For more information please contact [info@r-biopharmrhone.com](mailto:info@r-biopharmrhone.com)

## New Staff

R-Biopharm Rhône Ltd is continuing to buck the current economic trend by employing new staff at its facility in Glasgow. RBR has recently recruited a new Research & Development Scientist to lead a variety of projects in

addition to developing more column products for use with both HPLC and LC-MSMS. The company has also recruited new members of staff to help meet an increase in production and administrative functions.

## If you are interested in our products,

please contact your local distributor.

## Fairs and Conferences

23.03. - 26.03.2010	<b>Analytica 2010, Hall A3, Booth 404</b> Analytica is the largest trade fair in the world devoted to solutions for laboratory analysis, laboratory techniques and technology, and life sciences. Acknowledged as the leading trade fair, it is the communications and business event for the international community. Analytica is a model for the compact and user-oriented presentation of innovative products and solutions and for the representation of complete supply chains for industrial and research laboratories. Representative: R-Biopharm AG
29.04.2010	<b>Food Allergens - ,Thresholds &amp; testing' Seminar</b> Campden BRI Representative: R-Biopharm Rhône Ltd
09.05. - 12.05.2010	<b>Health Canada / FARRP Six Workshop on Food Allergen Methodologies</b> Toronto, Canada Representative: R-Biopharm AG
19.05. - 21.05.2010	<b>First International Vitamin Conference</b> Kopenhagen, Danmark Representative: R-Biopharm AG

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