

## New product

### EASI-EXTRACT® FOLIC ACID immunoaffinity column (RBRP81, 10 columns or RBRP81B, 50 columns)

R-Biopharm is pleased to announce the launch of EASI-EXTRACT® FOLIC ACID immunoaffinity column for the analysis of folic acid in a range of foods by HPLC. Folic acid and folate can occur naturally in food or can be taken as supplements.

Taking folic acid before and during pregnancy can help to reduce the occurrence of neural tube defects such as spina bifida. Recent studies in the US have also shown that taking folic acid containing multi-vitamin during the 2<sup>nd</sup> trimester has helped to reduce the incidence of pre-eclampsia in approximately 63 % of pregnant women studied. Researchers believe that folic acid and folates play an important role in the implantation and development of the placenta.

Due to the importance of vitamins, also with regard to the nutrition content labeling, a routinely vitamin analysis is required. Conventional HPLC methods for analysis of folic acid from complex foods is difficult since extremely low levels of folic acid are often present. Another problem is that the presence of pigments and interfering compounds in these matrices can also mask the presence of folic acid on an HPLC chromatogram.

The EASI-EXTRACT® FOLIC ACID immunoaffinity column overcomes these problems by using a highly specific monoclonal antibody to isolate and concentrate folic acid from the sample, whilst at the same time allowing pigments and interfering components to be washed from the column. The use of EASI-EXTRACT® FOLIC ACID gives rise to improved sensitivity and a much cleaner sample for analysis by HPLC.

EASI-EXTRACT® FOLIC ACID columns have been evaluated for the detection of added folic acid in a range of food types. The columns allow analysis of sample commodities containing between 10 – 100,000 µg folic acid per 100 g. To date vitamin tablets, vitamin premixes, cereals, flour, infant formula (powders and milk), dietetic milk powders and soya milk have been successfully analysed in-house using the protocols outlined in the instructions for use. In addition NIST powdered infant formula samples and FAPAS® cereal samples have been analysed using the EASI-EXTRACT® FOLIC ACID columns and results were found to lie within the assigned range.



## Our products

### NEW: Rapid test for the determination of peanut proteins RIDA®QUICK Peanut (R6203)

Peanut may be present as either an ingredient or a contaminant in raw and heat-processed foods. As a food ingredient that can trigger food allergies, peanuts had to be included on the list of ingredients of foodstuffs in compliance with EU Directive 2007/68/EC of 27 November 2007.

RIDA®QUICK Peanut (R6203) is an immunochromatographic assay for the qualitative determination of peanuts and traces of peanuts in foodstuffs such as cereals, pastries, ice creams and chocolate. The assay is based on the antigen-antibody reaction principle. The specific antibodies used in the assay react to peanut proteins, including Ara h1, h2 and h3.

The RIDA®QUICK Peanut assay is available in a cassette format, with each test kit containing 25 test cassettes for 25 individual tests.

The test kit is capable of detecting trace amounts of peanut (contamination) and has a very low detection limit of 5 ppm. The test results are available in approximately 40 minutes. This time frame includes the time required for both sample preparation and test procedure.

The test results are analysed visually by observing the formation of colored bands. The control band is not influenced by peanut proteins in the sample. At the end of a test reaction, the control band should always be visible as proof of correct function of the test. Generally, the higher the peanut concentration, the darker the blue colour of the test band. When testing samples containing high peanut concentrations (for example, 1 g peanut or 100 % peanut), no high-dose hook effect and, hence, no false-negative result will occur.

## New applications

For the new RIDASCREEN®FAST Casein test (R4602) are two separate application notes available on request.

- casein in bakery products
- casein in sausages, cake and bread mixes

The new RIDASCREEN®FAST Casein test was introduced in R-Biopharm News IV/07. This assay can now be ordered from our distributors.

## Optimised RIDASCREEN® Streptomycin assay (R3103)

The previous RIDASCREEN® Streptomycin test kit (R3101) has been improved and is now available under Art. No. R3103. During the transition period, both versions of the test can be ordered. Subsequently, the new RIDASCREEN® Streptomycin assay (R3103) will replace the old version.

For comparison, the most important specifications of the two tests are presented in the table below.

RIDASCREEN® Streptomycin	OLD	NEW
Art. No.	R3101	R3103
Test format	96 well-microtiter plate	96 well-microtiter plate
Substrat / chromogen	two components	one component
Washing solution	distilled water	washing buffer
Usable samples	milk, honey, meat and liver	milk, honey, meat and liver
Test procedure (Inkubation time)	2 h 30 min	1 h 15 min
Standard range	5 – 1280 ppb	0.5 – 40.5 ppb
Detection limit	milk: 20 ppb honey: approx. 20 ppb meat and liver: 25 ppb	milk: 10 ppb honey: approx. 5 ppb meat and liver: 25 ppb



## Optimised RIDASCREEN® Nitrofurantoin (AOZ) assay (R3703)

The RIDASCREEN® Nitrofurantoin (AOZ) test (R3701) has also been improved. The new version of the assay is now available as Art. No. R3703. For this assay, there will also be a transition period during which both versions of the test can be

ordered. After the transition period, the new RIDASCREEN® Nitrofurantoin (AOZ) assay (R3703) will replace the old version of the test (R3701).

For comparison, the most important specifications of the two tests are presented in the table below.

RIDASCREEN® Nitrofurantoin (AOZ)	OLD	NEW
Art. No.	R3701	R3703
Test format	96-well microtiter plate	96-well microtiter plate
Substrat / chromogen	one component	one component
Washing solution	washing buffer	washing buffer
Usable samples	shrimp, meat (chicken, pork, beef), liver, fish, whole egg and milk	shrimp, meat (chicken, pork, beef), liver, fish, whole egg and milk
Sample preparation	over night (approx. 19 h)	option I (short): approx. 6 h option II (long): over night (approx. 19 h)
Test procedure (Inkubation time)	1 h 15 min	1 h 15 min
Standard range	50 – 4050 ppt	25 – 400 ppt
Detection limit	shrimp and liver: approx. 200 ppt meat, fish, whole egg and milk: approx. 100 ppt	shrimp, fish and milk: approx. 50 ppt meat, liver and whole egg: approx. 100 ppt

## RIDASCREEN® Chloramphenicol (R1501)

The long transition period during which this test was supplied parallel to our improved RIDASCREEN® Chloramphenicol test kit (R1505) will soon end. Once the rest of the

current batch of the old test (R1501) has been sold, the expiry date of which is the end of April 2008, only the new test (R1505) will be available.

## SureFood® PCR Products from our partner company, CONGEN Biotechnology GmbH in Berlin



The increasing number and regionally variable prevalence of allergies to foodstuffs is a challenge for the affected food consumers as well as for food manufacturers.

In terms of legislation, this problem is regulated within the EU by the requirement to specify allergenic food ingredients on the labels of food products.

Fourteen allergenic food ingredients that must be indicated on the label of foodstuffs were named by the European Food Safety Authority (EFSA), the agency that advises the EU Commission and acts as its regulatory executive body. No minimum limits were defined, but exceptions are possible for certain products, which are indicated with an asterisk (\*) in the list below.

1. Cereals containing gluten (\*)
2. Crustaceans
3. Eggs
3. Fish (\*)
5. Peanuts
6. Soybeans (\*)
7. Milk (\*)
8. Nuts (\*)
9. Celery
10. Mustard
11. Sesame seeds
12. Sulphur dioxide and sulphites
13. Lupin
14. Molluscs

**“Ingredients or substances derived from these ingredients are excluded from the labelling requirement as it has been scientifically established that they are not likely, under specific circumstances, to trigger adverse reactions.” (Directive 2007/68/EC)**

The current EU Directive 2007/68/EC is an amendment of Directives 2005/26EC and 2000/13/EC.

R-Biopharm AG supplies two test systems for allergen detection: the immunological ELISA systems (RIDASCREEN®) and the DNA-based real-time PCR detection kits. The latter are manufactured by CONGEN Biotechnology GmbH, a leading player in this field. CONGEN has introduced new tests in response to the new requirements. In addition to the original tests for “classical” allergens and the recently introduced tests for the detection of fish (S3110) and lupin (S3111), the expanded SureFood® portfolio now includes detection kits for molluscs (S3113) and crustaceans (S3112).

Two main advantages of the SureFood® ALLERGEN real-time PCR system are that it can be run using all standard real-time PCR systems such as Block Cyclers and Light Cyclers and that one and the same ALLERGEN DNA preparation kit is used for all detections. This provides the user with a fast, easy and reliable method with which to perform the food allergen tests that will be expected in the future and to minimize the liability risks for the food manufacturer.

## If you are interested in our products,

please contact your local distributor.

## Informations from R-Biopharm Rhône (RBR), Scotland

### Commission proposal to overhaul EU food labeling laws

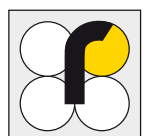
A large number of product recalls have already occurred in 2008 including the presence of foreign objects and food products which have been incorrectly labeled. Since the start of the year, there have been no less than 7 allergy alerts involving many of the UK's biggest supermarkets and concerning most of the 'Big 8' allergens for example wheat, soya, nuts and milk. Incidences such as these, and others involving nutritional values are amongst a variety of issues that the European Commission are focusing on and are likely to lead to proposals for additional legislation. It is hoped that these proposals will aim to provide accurate and up-to-date information to consumers whilst

providing information, which will help future negotiations in the EC. The Food Standards Agency in the UK are aiming to work alongside the European Commission and other Member States in delivering better food information and labeling for the benefit of consumers.

### Review of Veterinary Medicine Directorate – 10<sup>th</sup> January 2008

The Veterinary Medicines Directorate (VMD) held an Open Meeting on 10 January 2008 to discuss proposals to amend European law relating to residues of veterinary medicines in food such as antibiotics. The current legislative proposals are part of an ongoing programme by the European Commission to review and revise European Union law

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relating to such residues and to ensure they are within safe limits. The review includes three main pieces of legislation, but the meeting focused on the proposal to replace Council Regulation 2377/90, which lays down a Community procedure for the establishment of Maximum Residue Limits (MRLs) of veterinary medicinal products in foodstuffs of animal origin.

In the UK control purposes are necessary for the detection of the presence of prohibited substances in food entering the EU from third world countries. It is essential that a clear strategy be produced that both EU and non-EU producers can understand and is straightforward to enforce without compromising consumer protection. The meeting also highlighted the fact that some laboratories are unable to analyse down to the low concentrations required and this has resulted in consignments being unnecessarily destroyed. Some third world countries however believe that it is acceptable to use

a prohibited substance in produce destined for the EU provided it is below the acceptable limits when analysed upon arrival in the EU. In order to help laboratories in the Member States work within the stated limits, R-Biopharm have a range of ELISAs specifically designed for the analysis of antibiotics in various commodities.

#### **Kobra Cell Voltage Info**

R-Biopharm Rhone Ltd would like to advise customers that due to changes in the electronics of the kobra cell powerpack, the powerpacks and adapters have now been changed to 9 V instead of 15 V. The new 9 V powerpacks and adapters will be labelled as such, anything which is unmarked will be prior to this change and should be considered to be 15 V. Please do not interchange old and new adapters and powerpacks since this may have a detrimental effect on the cell.

## Fairs and Conferences



**01.04. – 04.04.2008**

#### **Analytika 2008**

Munich, Hall A3, Booth No. 404  
Representative: R-Biopharm AG

Analytika 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. Analytika 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.

**29.05. – 31.05.2008**

#### **INGESA 2008 –**

**International Grain Trading Conference in Salzburg**  
WIFI Salzburg in Salzburg, Austria  
Representative: R-Biopharm AG, Christine M. Gutschelhofer, DI

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