

Our products

VitaFast[®] Product line

FAPAS[®] Proficiency Test 2150 – Vitamin B12

Results of a recent FAPAS[®] study for the determination of various vitamins in baby food including vitamin B12 are now available. The study was conducted between November 2007 and January 2008. Several of the participants in the FAPAS[®] inter-laboratory study used the EASI-EXTRACT[®] VITAMIN B12 columns and the VitaFast[®] microbial assay to analyse the samples for vitamin B12 content.

The labs we know about have attained very good Z scores ($\leq +/ - 0.3$) for the analysis of vitamin B12. The results demonstrate that both the EASI-EXTRACT[®] VITAMIN B12 columns, as well as the VitaFast[®] microbial assays, are suitable for detecting vitamin B12 in complex food matrices, such as baby food.

NEW: Pancreatin from chicken (P2002)

R-Biopharm is pleased to be able to offer chicken pancreatin (γ -glutamylhydrolase) from the beginning of July this year – for determining natural folic acid in feedstuffs and animal feeds containing folic acid. The folypolylglutamates are hydrolysed to folylmonoglutamates or folyldiglutamates

through treatment with chicken pancreatin. This enzyme can therefore be used to optimise the microbial determination of folic acid in microtiter plate format (VitaFast[®]). The use of chicken pancreatin has proven to be particularly beneficial for green vegetables (e.g. broccoli, spinach), grain products and yeast.

VitaFast[®] amino acid assays

Modern feedstuffs are tailored to the nutritional requirements of the respective animal species, therefore precise dosage and monitoring of the available amino acids is of fundamental importance. Microbial VitaFast[®] amino acid assays are available to determine the adequate concentration of amino acids in foodstuffs. Depending on processing, the content of both added and natural amino acids can be determined. The following results for the analysis of methionin content were obtained in the investigation of various feedstuffs (see below in the table).

It is clear from the results that the VitaFast[®] amino acid assays are very well suited for the analysis of both natural and added amino acids. Besides the determination of methionin, assays for determining lysine and cystine are also available.

Determination of methionin in feedstuffs using VitaFast[®] methionin

Sample	Target content g/100 g	Added DL-methionin g/100 g	Coefficient of variation (CV in %)	Bound natural L-methionin g/100 g	Coefficient of variation (CV in %)	Total content of methionin g/100 g	Recovery (in %)
soya flour	0.65	n.n.	n.n.	0.66	8.5 (n = 4)	0.66	102
chicken meal	0.78	0.15	5.3 (n = 4)	0.70	6.5 (n = 4)	0.85	109
poultry feed	0.59	0.30	5.6 (n = 4)	0.34	5.4 (n = 4)	0.64	108
sun-flower	0.78	0.02	7.2 (n = 4)	0.78	6.3 (n = 4)	0.80	103

n = number of dilutions

Validation reports on RIDASCREEN[®] Gliadin (R7001) and RIDASCREEN[®]FAST Gliadin (R7002)

The previous validation reports on the RIDASCREEN[®] Gliadin and RIDASCREEN[®]FAST Gliadin assays have been integrated in a comprehensive product information brochure. The validation data has been updated and combined with general

information, such as the advantages of the assays, sample processing and methodology. This information brochure on the assays is available as a PDF file by e-mail or as a printed copy by post.

RIDA® System – applications and equipment

R-Biopharm now also offers equipment solutions to users of the various assays. These devices are combined under the name RIDA® System.

At present, photometers are offered for evaluating ELISA assay systems, a strip reader for evaluating the RIDA®QUICK mycotoxin assays, microtiter plate washers, incubators for the RIDA®COUNT test cards, as well as the 'KOBRA® Cell' for pre-column derivatization.

The range is supplemented with the ChemWell® 2910 – a fully automatic system, with which complete tests can be processed.

Methods for the RIDASCREEN®FAST Aflatoxin and DON assays, the RIDASCREEN® Chloramphenicol and Salmonella assays, and for enzymatic bioanalytical and food analysis tests have already been adapted. Please contact us if you are interested in comprehensive information.



SureFood® PCR products from our partner CONGEN Biotechnologie GmbH, Berlin

Change in the GMO Regulation: Bt63 rice

Rice (Latin: oryza) is a plant species from the sweet grass family (proceae). Rice is the dietary staple in some Asian countries and Asia is also the main region for cultivating rice with 95 % of world yield.

Ever since the rice genome was decoded, intensive research has been conducted on genetically modified rice (GMO rice), which is higher yielding and resistant against pests, periods of drought and a high soil salt content. Through the introduction of a gene from the soil bacteria *Bacillus thuringiensis*, Bt63 rice developed in China is resistant against insect pests. This genetically modified rice has only been subjected to field trials since 2001 and then tested in large-scale cultivation trials. Through further illegal cultivation in China, this GMO rice, neither approved in the EU nor in China, found its way into the food chain.

Contamination with this GMO rice in Chinese rice products was first discovered inside the EU in September 2006. In spite of

the measures demanded of the Chinese authorities by the European Union, rice products with Bt63 rice have since been repeatedly reported by the EU early warning system. Since 15 April 2008, the EU has called for a certificate for Chinese rice products stating that no Bt63 rice is detectable.

SureFood® GMO Bt63 (Art. No. S2024)

With this test, genetically modified DNA from Bt63 rice is detected with the aid of a construct-specific real-time PCR system. The SureFood® GMO Bt63 Rice assay also includes a reference PCR system for rice. This allows rice products to be tested quickly and reliably for Bt63 rice contamination, whereby no cross-reactivities are known. The detection limit is ≤ 5 DNA copies. This is also dependent on the sample matrix, processing and DNA preparation.

The GMO limit values are stipulated in the EU directives EC 1829/2003 and EC 830/2003. The EC 289/2008 regulation defines the conditions for Bt63 rice.

If you are interested in our products,
please contact your local distributor.

Informationen from R-Biopharm Rhône, Scotland

New Application note for the OCHRAPREP Immunoaffinity Column (RBRP14/P14B)

A new application note is available for the analysis of Ochratoxin A in roast and filtered coffee. This new method uses a 1 % Sodium bicarbonate solution to extract the toxin.

A portion of the filtrate is then diluted with a PBS and Tween 20 solution before being passed through the immunoaffinity column. The column is then also washed with a PBS/ Tween 20 solution to remove pigments prior to elution. Recoveries obtained with this method were approximately 90 %. This new application note is now included in the product information for OCHRAPREP.

EASI-EXTRACT® FOLIC ACID Poster

In February we introduced our new EASI-EXTRACT® FOLIC ACID immunoaffinity column (Art. No. RBRP81/P81B), which has been validated on a range of food types, including cereal. Cereal based fortified foods are generally difficult to analyse and require an enzymatic digestion in order to release the vitamin matrix.

R-Biopharm Rhône has evaluated a method using the enzyme pancreatin to break down the sample releasing folic acid for concentration and purification on the immunoaffinity column and analysis by UV-HPLC. The method was evaluated using various samples including FAPAS® reference material and the percentage folic acid recovered relative to the claim was 105 % with a RSD of 2.9 %

From the study it can be concluded that EASI-EXTRACT® FOLIC ACID columns selectively isolate folic acid from complex cereal products enabling accurate and repeatable quantification due to excellent resolution of the folic acid peak. This work has been summarised in a poster, which will be exhibited at the ICC meeting in Turkey, Madrid and a cereal conference Australia.

Demo Kits

As from 1st May, R-Biopharm Rhône will change the format of the demo kits for the immunoaffinity column range. The new demo kits will contain 5 columns in a sealed pouch along with the instructions for use and a certificate of analysis for the appropriate column batch. These new demo packs will replace the previous 10 column boxed demo kits. The new product code (Art. No.) for the 5-column demo kits are as follows:

• AFLAPREP®	RBRP102
• AFLAPREP® M	RBRP101
• EASI-EXTRACT® AFLATOXIN	RBRP103
• OCHRAPREP®	RBRP92
• FUMONIPREP®	RBRP93
• DONPREP®	RBRP94
• EASI-EXTRACT® ZEARELENONE	RBRP95
• EASI-EXTRACT® T-2 & HT-2	RBRP96
• EASI-EXTRACT® VITAMIN B12	RBRP97
• EASI-EXTRACT® FOLIC ACID	RBRP98

With increasing legislation these new 5-column packs can be used for evaluation purposes or for introducing additional types of mycotoxin analysis in your laboratory. For price information and further details, please contact your local distributor.

New Standards

Further to the new Fusarium legislation we are also pleased to introduce two new standards to our product range for T-2 toxin (Art. No. RBRP74) and HT-2 toxin (Art. No. RBRP75). The standards are available in a crystalline form and are reconstituted before use. The standards can be used in conjunction with the EASI-EXTRACT® T-2 and HT-2 columns for analysis of a wide range of different food matrices.



Meetings and Events in Austria

Conference: Vitamins

In recent years, the word "vitamin" has become a standard term of daily life. Products fortified and enriched with vitamins are present on virtually every shelf of grocery and feed stores.

This conference addresses the persons responsible for food and feedstuff quality. The mechanism of action of vitamins, vitamin requirements, vitamin occurrence, and methods of vitamin analysis will be covered without neglecting the relevant legal aspects.

Continuation Conference: Vitamins

Organiser:	R-Biopharm in co-operation with AGES and ICC
When:	Tuesday, October 28 th 2008 8:45 a.m. to 05:30 p.m. (approximately)
Venue:	AGES CC Cluster Chemie, Wieningerstraße 8, A-4021 Linz
Registration fee:	€ 150.00
Information/registration:	Christine M. Gutschelhofer, DI E-mail: c.gutschelhofer@r-biopharm.de Mobile: +43 (0) 664 - 135 21 22

Workshop: Mycotoxins (2 days)

On Day 1, the participants will be introduced to the theoretical principles underlying the mycotoxin problem and presented information on the current legal situation, avoidance strategies and analytical methods (ELISA, test cards, test strips, IAC/HPLC). Day 2 will provide participants an opportunity for practical training during which they can try out the analytical methods in the laboratory.

Organiser:	R-Biopharm in co-operation with AGES and ICC
When:	Wednesday, October 29 th and Thursday, October 30 th 2008 8:45 a.m. to 05:30 p.m. (approximately)
Venue:	AGES CC Cluster Chemie, Wieningerstraße 8, A-4021 Linz
Registration fee:	Single day (October 29 th 2008): € 150.00 Both days (October 29 th and 30 th 2008): € 300.00
Information/registration:	Christine M. Gutschelhofer, DI E-mail: c.gutschelhofer@r-biopharm.de Mobile: +43 (0) 664 - 135 21 22

Fairs and Conferences

29.09. – 02.10.2008	49th Working Conference on Food Hygiene of the German Veterinary Medicine Society (DVG) Garmisch-Partenkirchen Representative: R-Biopharm AG
12.11. – 14.11.2008	BRAU Beviale 2008 48 th European Trade Fair for the German Beverage Industry Nürnberg Representative: R-Biopharm AG, Dr. Martin Mehl



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