

New products

The Topics:

- p.2 New products
- p.3 Our products
- p.4 Information from R-Biopharm Rhône, Scotland
- p.6 Fairs and conferences

RIDASCREEN® Gliadin competitive

The second generation of RIDASCREEN® Gliadin competitive (Art. No. R7021) was launched in April and replaces the former RIDASCREEN® Gliadin competitive with the Art. No. R7011.

This test system is used for the analysis of fermented and hydrolyzed food (e.g. beer, starch syrup, starch, malt extract, sourdough, soy sauce) which are declared as "gluten-free". These foods contain single, small gluten peptide sequences, which can only be detected by a competitive ELISA.

The new improved kit has the following characteristics:

- The standard material is a hydrolysate (mixture of wheat, rye and barley) and allows quantification according to the limit values stipulated by the Codex Alimentarius.
- The detection limit is 1.36 mg Gliadin / kg (ppm) food.
- The limit of quantification is 5 mg / kg (ppm) food.

- The R5 monoclonal antibody recognizes potentially toxic peptide sequences of gliadins from wheat and related prolamins from rye and barley
- There is no cross-reaction with soy, oats, corn, rice, millet, teff, buckwheat, Quinoa and Amaranth.

For further information the following marketing material is available:

- **Test kit insert** – RIDASCREEN® Gliadin competitive (Art. No. R7021)
- **Background information** – RIDASCREEN® Gliadin competitive (Art. No. R7021)
- **Validation report** – RIDASCREEN® Gliadin competitive (Art. No. R7021)
- **Brochure** – Analytical Test Kits to ensure gluten-free Food Products (02/2011)
- Specificity of the R5 antibody employed in the Gliadin product line.

For evaluation the RIDA®SOFT Win Version 1.77 is necessary to be used.



further new products on page 2

RIDASCREEN®FAST Lysozym



Since May R-Biopharm has extended the product portfolio for the allergen ELISAs with the RIDASCREEN®FAST Lysozym ELISA (Art. No. R6452). This kit is suitable for the quantitative detection of lysozyme (hen's egg protein) in foods like wine, cheese or sausage. Lysozyme is one of the allergenic egg white proteins and is contained to 3.5 % in egg white protein. In addition to ovalbumin, ovomucoid and ovomucoprotein, lysozyme can lead people to allergic reactions. Under the European

Allergen Regulation egg has to be declared in food. Lysozyme is often used as a preservative in wine production as well as in sausage production. It is also used for cheese production to prevent butyric acid fermentation by the bacterium *Clostridium tyrobutyricum*. The detection limit of the RIDASCREEN®FAST Lysozym ELISA is 0.02 mg/kg and the limit of quantification is 0.05 mg/kg (ppm) lysozyme. The RIDASCREEN®FAST Lysozym ELISA shows no cross reactivity to chicken meat or other egg proteins.

RIDASCREEN® Nitrofuran (SEM) – a new ELISA for quantitative detection of nitrofuran antibiotics



Nitrofurans are synthetic broad-spectrum antibiotics which were used in the past because of their antibacterial and pharmacokinetic properties for the treatment of sick farm animals and as a fattening agent. Because of the proven carcinogenicity of nitrofurans, foods contaminated with nitrofuran residues (e.g. meat or shrimp) pose a health risk to consumers. Consequently, an EU-wide ban was placed on the use of nitrofurans in farm animals used for food production (Commission Regulation (EU) No 37/2010), and a Minimum Required Performance Limit (MRPL) of 1 µg/kg (1 ppb) was set for methods used to detect these substances (2003/181/EC). Because the nitrofuran parent drugs are no longer detectable within a very short period of time, the analysis of nitrofuran residues is based on the detection of nitrofuran metabolites. In addition to the proven RIDASCREEN® Nitrofuran (AOZ), Art. No. R3703 / (AMOZ), Art. No. R3711, ELISA test systems for the detection of furazolidone / furaltadone

metabolites, R-Biopharm now offers the new RIDASCREEN® Nitrofuran (SEM), Art. No. R3715, test kit for the detection of nitrofurazone metabolites. RIDASCREEN® Nitrofuran




(SEM) is a competitive enzyme immunoassay for the quantitative detection of Semicarbazide (SEM) in shrimp, meat (chicken, pork, beef) and fish.

The detailed specifications are summarized in the following table:

Standards	0, 100, 300, 900, 2700, 8100 ppt	
Test procedure	1 h 15 min	
MRPL	1 µg / kg = 1 ppb	
Detection limit	Shrimp, beef, pork:	0.3 ppb
	Fish:	0.36 ppb
	Poultry:	0.4 ppb
Recovery	Shrimp:	approx. 98 %
	Beef:	approx. 94 %
	Pork:	approx. 92 %
	Fish:	approx. 98 %
	Poultry:	approx. 110 %
Specificity	AOZ:	< 0.01 %
	AMOZ:	< 0.01 %
	AHD:	< 0.01 %

Our products

RIDASCREEN® SET A,B,C,D,E



The improved RIDASCREEN® SET A,B,C,D,E (Art. No. R4101) is available starting in May. This tried and tested kit is now provided in a new format after adaptation of the assay procedure and detection system to the modern technology of RIDASCREEN® SET Total (R4105) which was introduced last year. Validation of RIDASCREEN® SET Total by the European Union Reference Laboratory for Coagulase-Positive Staphylococci (Maisons-Alfort Cedex, France) confirmed that the improved sandwich ELISA system of RIDASCREEN® SET Total offers advantages in comparison with the former detection system for staphylococcal enterotoxins. In SET Total, a detection molecule is bound to the detection antibody in an additional incubation step. In the previous SET A, B, C, D, E system, the detection antibody was attached directly to the detection molecule. RIDASCREEN® SET A,B,C,D,E was therefore revised accordingly

and adapted to the test procedure for RIDASCREEN® SET Total. The order of detection of the individual toxins on the microtiter strips with integrated negative controls remains the same. Only one additional pipetting, washing and incubation step is needed for the test procedure (as for the SET Total).

The European interlaboratory test launched to confirm the suitability of RIDASCREEN® SET Total as a screening method for staphylococcal enterotoxins, which was planned by the European Reference Laboratory for Coagulase Positive Staphylococci, has already been completed. By the end of February, cheese and ham samples contaminated with enterotoxins had been tested by 20 participating laboratories from nine countries (according to ISO 16140). The validation report will be published after completion of the evaluation by the European Reference Laboratory.



RIDASCREEN® SET A,B,C,D,E
Art. No. R4101

New: GEN-IAL® real-time PCR kit for detection of *Brettanomyces* in wine

Outbreaks of *Brettanomyces* yeasts in red and white wines from different regions have been increasingly reported in recent years. This primarily affects wines aged in wooden barrels, but also those produced in steel tanks. *Brettanomyces* forms taste- and aroma-altering phenolic degradation products that reduce the value of the wine. A newly developed real-time PCR test manufactured by GEN-IAL now makes it possible to detect *Brettanomyces* infection in the early stages, even in the presence of an excess of other yeasts and in red wines with a high tannin content.

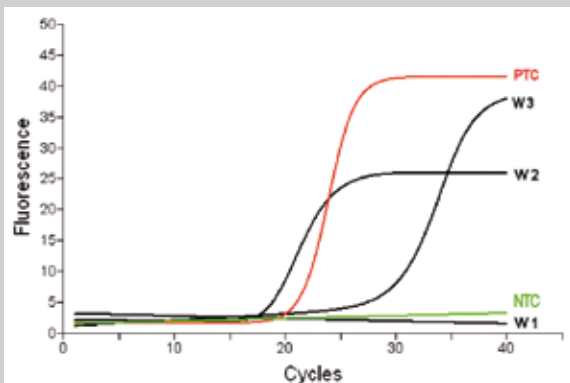
Simplex® Easy Wine SEW 0100, the new DNA preparation kit, enables easy DNA preparation and polyphenol decrease. The First-Dekkera

bruxellensis PCR Kit (TPYDYDB 0050) which is already used in the beer industry, is subsequently used for highly specific and sensitive *Brettanomyces* detection. An internal amplification control is tested with each sample to rule out false negative results. This combination of tests can be used on all commercially available thermal cyclers.

Spartan DX-12™ is a simple and inexpensive real-time/endpoint thermal cyclers for which there is a kit with pre-coated reaction vessels available. It is an easy-to-use system that makes it possible to perform rapid quantitative analyses, even in non-expert wine laboratories. The investment costs for this PCR system are relatively low.



PTC – Positive control
 NTC – Negative control



Test run of three French red wines (W1, W2, W3) with different levels of *Brettanomyces* contamination. The internal amplification

control at 25 Ct excludes PCR inhibition. Cell numbers can be counted using the quantification program (with limitations).

Information from R-Biopharm Rhône, Scotland

Launch of new immunoaffinity column for the detection of chloramphenicol

Chloramphenicol is a broad spectrum antibiotic that is used in veterinary practice against both gram-positive and gram-negative bacteria. However, in some countries it is used to promote animal growth and to cover poor hygiene conditions on farms.

Due to the toxicity of chloramphenicol and resistance to this antibiotic, it is no longer used as a first line agent. In most countries the drug is banned for use in food producing animals. The current legislative limits for chloramphenicol are as follows:

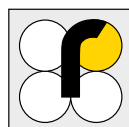
Molecule	Animal Species	Commodity	MRL	MRPL
Chloramphenicol	All animal species	Muscle	0 ppb	0.3 ppb
		Milk	0 ppb	0.3 ppb
		Eggs	0 ppb	0.3 ppb
		Urine	0 ppb	0.3 ppb
		Aquaculture products	0 ppb	0.3 ppb
		Honey	0 ppb	0.3 ppb

MRL – Maximum Residue Level (Commission Regulation EU 37/2010)

MRPL – Minimum Required Performance Level (Commission Decision 2003/181/EC)

Products with residue levels above the recommended levels are condemned and denied entry to the food chain. Surveillance and testing of antibiotics has therefore increased however there is a requirement for a rapid, easy to perform and inexpensive test. Analysis of antibiotics can often be problematic due to the very small levels present, so method sensitivity and sample preparation are particularly important.

The use of EASI-EXTRACT® CHLORAMPHENICOL immunoaffinity columns (Art. No. RBRP300/300B) over comes these issues as they offer an easy way to extract, purify and selectively concentrate chloramphenicol from a wide range of food and feed commodities, including honey, royal jelly, bee pollen and milk, allowing optimum detection by HPLC or LC-MS/MS.



Training facilities in Glasgow

R-Biopharm Rhône (RBR) has been in the new building now for 2 years. The move provided RBR with bigger and better production, research and meeting facilities and has allowed RBR to improve the service to customers and distributors alike. One way in which RBR maintain the support

to customers is to offer free trainings for the complete range of their products. Over the two years the number of trainings which can be offered was increased. The most recent training was an Allergen Workshop held in conjunction with Food Allergy Support and FAPAS.

If you are interested in our products,

please contact your local distributor.

R-Biopharm AG



The RIDASCREEN® Milk Concept

Analytical test kits for ensuring
milk-free food

ELISA



Product testing

Screening of total milk protein in food
with unknown content

RIDASCREEN®FAST Milk

New!

Specific protein detection in food

RIDASCREEN®FAST Casein

RIDASCREEN®FAST β -Lactoglobulin

RIDASCREEN® β -Lactoglobulin

Lateral
Flow

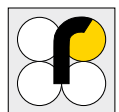


Process control or hygiene monitoring

bioavid Lateral Flow Milk

www.r-biopharm.com

r-biopharm



Fairs and conferences Representative: R-Biopharm AG



20.06. – 22.06.2011	International Celiac Disease Symposium Radisson BLU Scandinavia Hotel, Oslo, Norway http://www.icds2011.org/
18.09. – 21.09.2011	AOAC Annual Meeting Sheraton, New Orleans, USA http://www.aoac.org/meetings1/125th_annual_mtg/main_2.htm
27.09. – 29.09.2011	3rd MoniQa International Conference Hotel Meliá Grand Hermitage, Varna, Bulgarija http://varna2011.moniqa.org/
10.10. – 12.10.2011	AOAC International Workshop University of Erlangen, Germany http://www.aocaeurope.com/
12.10. – 14.10.2011	Analytica Anacon India Bombay Exhibition Center, Mumbai, India http://www.analyticaindia.com/
16.10. – 19.10.2011	AACC International annual Meeting Palm Springs Convention Center, Palm Springs, USA http://meeting.aaccnet.org
01.11. – 04.11.2011	RAFA Recent Advances in Food Analysis Clarion Congress Hotel, Prague, Czech Republic http://www.rafa2011.eu
15.11. – 18.11.2011	ISM-MycoRed Argentina Convention Center Mendoza, Argentina http://mycored2011.com.ar

The next R-Biopharm^{news} will be published in the IIIrd quarter 2011.

R-Biopharm^{news} is edited by

R-Biopharm AG
An der neuen Bergstraße 17
64297 Darmstadt, Germany
Reg.-Nr.: Amtsgericht Darmstadt, HRB 8321
Phone: +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

r-biopharm

