

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

SureFood® ANIMAL ID Pork Sens (S6017V, S6017R, S6017LC)

SureFood® ANIMAL ID Pork Sens real-time PCR test kits (PLUS V, PLUS R, PLUS LC) are based on a multicopy target (cyt b). In tests carried out by the manufacturer, they were found to have an extremely high sensitivity of 5 ppm.

For example, the following sensitivity levels (in ppm) were found for processed canned meat samples containing pork mixed with beef:

500 ppm (0.05 %) ≈ Ct 25
50 ppm (0.005 %) ≈ Ct 28.5
5 ppm (0.0005 %) ≈ Ct 32

There are no internationally harmonized standards regarding the maximum limits for non-declaration of pork. Production-related cross-contamination of non-pork meat products with 0.5 % to 1 % pork is considered acceptable in many European countries.

Such cross-contamination cannot be excluded if there is joint use of butchering process lines and/or other production-related processes, despite cleaning between the different production processes.

Pork Sens is highly sensitive, detecting pork contamination far below these limits.

Other limits may apply in other countries, for example Islamic countries follow a zero-tolerance strategy in accordance with Islamic dietary law (Halal). In other words, the pork content must be zero or near zero. For technical reasons, a limit value must always be defined for analytical measurements.

Modern analytical techniques provide the respective authorities with a way to define practically feasible limit values. Pork Sens tests can be run on any commercially available real-time PCR systems. Each kit contains sufficient reagents for 100 determinations. The different test versions have internal inhibition controls for systems with either VIC, ROX or LC detection channels.



Information from R-Biopharm Rhône (RBR), Scotland

Codex sets limits for melamine and aflatoxin in food

The World Health Organisation (WHO) has announced the first global limits on permitted melamine levels in food at its annual summit in Switzerland.

The Codex Alimentarius Commission agreed to set the threshold for the chemical at 2.5 mg/kg, while the permitted level for infant formula milk was set at 1 mg/kg. Melamine is an organic base chemical, rich in nitrogen which is used in a variety of industrial processes.

These can include some food contact surfaces in processing plants and traces of it unavoidably can get into food by contact.

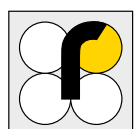
The chemical is toxic at high levels, shown by the food contamination outbreak in China in 2008 which resulted in the deaths of 6 children but affected over 300,000.

While not legally binding the new levels allow countries to refuse to allow the importation

of products with excessive levels of melamine. R-Biopharm Rhone Ltd has recently launched new melamine solid phase clean-up columns for the analysis of melamine in a range of commodities by HPLC or LC-MS/MS.

The melamine solid phase clean-up columns (RBRP111) have been proven to give excellent recoveries and have a limit of detection in line with these new levels when used in conjunction with HPLC. The columns have been evaluated for the detection of melamine in infant formula, dairy products, chocolate products and animal feed by HPLC.

Meanwhile, maximum levels of 10 µg/kg for aflatoxins in Brazil nuts (shelled, ready-to-eat) and 15 µg/kg for shelled Brazil nuts (intended for further processing) were also set by Codex. The Commission also adopted a code of practice to prevent this contamination.



Campylobacter poses UK safety challenge

According to the Food Standards Agency, Campylobacter in raw chicken is the biggest food safety challenge facing the UK today. Foodborne diseases including Campylobacter cost the UK economy £ 1.5 bn annually. It causes 1 million illnesses a year which lead to 20,000 hospital treatments and 500 deaths with chicken and beef the main foods associated with the problem. The FSA have a £ 25 m Foodborne Disease Strategy to tackle all types of food poisoning by 2015 which would bring a number of benefits - with each one per cent reduction in overall incidence leading to 10,000 fewer cases and an economic saving of around £ 15 m per year. Campylobacter are currently considered as the most frequent bacterial cause of infectious intestinal diseases (campylobacteriosis) worldwide. Besides these campylobacteriosis, additional intestinal diseases in humans

may be caused by Campylobacter as well. Bacteria of the genus Campylobacter are almost ubiquitously distributed, but the main reservoir of Campylobacter is the intestinal tract of warm-blooded animals, in particular birds including poultry and laying hens. Campylobacteriosis is mainly transmitted to humans by foodstuffs. Insufficiently heated or re-contaminated poultry meat and poultry products are regarded as the major source of infections. Moreover, unpasteurized milk, contaminated surface water, and raw ground meat can cause outbreaks of campylobacteriosis.

C. jejuni is the most pathogenic species within the genus Campylobacter. Additionally, *C. coli* and *C. lari* are also associated with human diseases.

It is possible to analyse samples for Campylobacter either using an ELISA or by PCR.


New Quality Certificates

RBR would like to inform all customers that RBR now have a new format certificates of analysis which can be found in the most recent batches of kits.

These certificates will be found in all of the R-Biopharm Rhône products and will contain additional information on the products e.g. column capacity.

If you are interested in our products,

please contact your local distributor.

R-Biopharm AG 

Test kits for Microbiology and Hygiene Monitoring

- ATP
- Protein residues
- Total count
- Coliform
- E. coli
- E. coli/Coliform
- Staph. aureus
- Enterobacteriaceae
- Yeast & Mold
- Salmonella
- Listeria
- Campylobacter
- Vibrio
- Bacterial toxins
- Norovirus
- Beer spoiling bacteria and yeasts

Easy and precise

In various formats:

- RIDA[®]COUNT**
Microbiological test cards – versatile applicable
- Lumitester PD-20**
Detection of ATP/AMP
- RIDA[®]CHECK**
Detection of protein residues on surfaces
- RIDASCREEN[®]/ LOCATE[®]**
Enzyme linked immunoassay for detection of toxins and pathogens
- SureFood[®] PATHOGEN**
Real-time PCR for detection of pathogens
- GEN-IAL[®]**
Real-time PCR for detection of beer spoiling bacteria and yeasts

Fairs and conferences Representative: R-Biopharm AG



14.10. - 15.10.2010	Mykotoxiny 2010 Prag, Czech Republic
24.10. - 27.10.2010	AACC International Annual Meeting Trade & Convention Center Savannah, Georgia, USA
08.11. - 10.11.2010	World Mycotoxin Forum – 6th Conference NH Conference Center Leeuwenhorst Noordwijkerhout, Netherlands
01.12. - 04.12.2010	International Mycotoxin Conference – MycoRed 2010 Park Royal Hotel Feringghi Beach, Penang, Malaysia
09.12.- 10.12.2010	2nd Food Safety Congress Istanbul, Turkey

The next R-Biopharm^{news} will be published in the IVth quarter 2010.

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

