



# Analysis for microbiological food safety

Rapid test formats for reliable microbiological analysis in food and plants for highly specific, sensitive and fast test combinations for use with a wide range of applications.

#### **Product testing**

All kinds of commodities are potentially at risk of contamination by spoiling organisms and pathogens. Therefore, R-Biopharm offers reliable kits for the analysis of meat and meat-products, dairy products, egg and egg-products, vegetable, fruits, herbs and spices, beverages, cereals and cereal-products as well as prepared meals. Well-established methods for on-site testing are classic microbiological testing, highly specific detection with real-time PCR, or confirmation of bacterial toxins by ELISA-tests.

## Production surrounding area and condition

Quality and safety standards are considered when minimizing the risk of product contamination.

Important characteristics for tests used in efficient hygiene and cleaning control are:

- High sensitivity
- Rapidness
- Repeatability

Reliability of results is important for immediate and long-term decisions.



#### **Bacterial toxins and pathogens**

#### RIDASCREEN® ELISA

- Detection of bacterial toxins
- Detection of pathogens

#### **Compact Dry**

Dry nutrient media for detection of pathogens



#### Bacteria, yeast and mould, viruses

## SureFast® real-time PCR GEN-IAL® real-time PCR

- For screening und species identification
- Effective DNA/RNA extraction
- Multiplex real-time kits

#### **Compact Dry**

Dry nutrient media for enumeration of microorganisms



#### Hygiene & cleaning

## Compact Dry with wet swab systems, RIDA®STAMP

Nutrient media for detection of microorganisms

#### Lumitester PD-30 with LuciPac® Pen

- Sensitive AMP/ATP detection
- Automatic alinement of measured data
- Software based evaluation

#### RIDA®CHECK

- Detection of protein residues
- Colorimetric test for rapid cleaning control





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## Microbiology/hygiene

## Culture medium systems for colony counting and pathogen detection in food or surface samples

Product	Description	No. of tests/amount	Art. No.
Compact Dry	Nutrient pads		
Compact Dry AQ	Test plate with nutrient pad for quantitative detection of heterotrophic water bacteria	100 determinations 40 determinations	HS9541 HS9542
Compact Dry CC	Test plate with nutrient pad for detection of total aerobic count in teaproducts	100 determinations 40 determinations	HS7311 HS7312
Compact Dry CF MicroVal MV0806-003L; NordVal 35; AOAC-RI 110401	Test plate with nutrient pad for quantitative detection of coliforms	100 determinations 40 determinations	HS8791 HS8792
Compact Dry EC MicroVal MV0806-004LR; NordVal 36; AOAC-RI 110402	Test plate with nutrient pad for quantitative detection of <i>E. coli</i> and coliforms	100 determinations 40 determinations	HS8781 HS8782
Compact Dry ETB MicroVal MV0806-002LR; NordVal 34	Test plate with nutrient pad for quantitative detection of Enterobacteriaceae	100 determinations 40 determinations	HS9431 HS9432
Compact Dry ETC NordVal 47	Test plate with nutrient pad for quantitative detection of Enterococci	100 determinations 40 determinations	HS9461 HS9462
Compact Dry LS	Test plate with nutrient pad for quantitative detection of Listeria spp.	100 determinations 40 determinations	HS8811 HS8812
Compact Dry PA	Test plate with nutrient pad for quantitative detection of Pseudomonas aeruginosa	100 determinations 40 determinations	HS9491 HS9492
Compact Dry SL	Test plate with nutrient pad for detection of Salmonella	100 determinations 40 determinations	HS9401 HS9402
Compact Dry TC MicroVal RQA2007LR01; NordVal 33; AOAC-RI 10404	Test plate with nutrient pad for detection of total aerobic count	100 determinations 40 determinations	HS8771 HS8772
Compact Dry VP	Test plate with nutrient pad for quantitative detection of Vibrio parahaemolyticus and Vibrio spp.	100 determinations 40 determinations	HS8821 HS8822
Compact Dry YM MicroVal RQA2008LR10; NordVal 43; AOAC-RI 100401	Test plate with nutrient pad for quantitative detection of yeast and mold	100 determinations 40 determinations	HS8801 HS8802
Compact Dry YMR MicroVal 2016LR61	Test plate with nutrient pad for rapid quantitative detection of yeast and mold in 48 - 72 h	100 determinations 40 determinations	HS9801 HS9802
Compact Dry X-BC	Test plate with nutrient pad for quantitative detection of Bacillus cereus	100 determinations 40 determinations	HS9721 HS9722
Compact Dry X-SA MicroVal 2008LR14; NordVal 42; AOAC-RI 81001	Test plate with nutrient pad for quantitative detection of Staphylococcus aureus	100 determinations 40 determinations	HS9621 HS9622
	Accessories		
RIDA® 0.9 % NaCl, sterile	1 ml sterile sodium chloride solution	150 pieces (1 ml each)	Z0301
Promedia ST-25	Sampling device (sterile swab in 10 ml sterile PBS buffer)	10 pieces	Z0302
Compact DrySwab	Sampling set (sterile swabs in 1 ml PBS/peptone buffer)	40 pieces	ZCS1002953
Dilution Rack-PBS	Dilution set for preparation of 10-fold dilution series (9 ml PBS buffer per well) – sterile	128 pieces	ZDP1000888
Dilution Rack-MRD	Dilution set for preparation of 10-fold dilution series (9 ml MRD buffer per well) – sterile	128 pieces	ZDM1000889
Opener for Dilution Rack	For sterile opening of Dilution Rack	1 piece	ZOP1000887
Frame – 100 cm²	Frame for definition of 100 cm <sup>2</sup> for swab sampling	5 pieces	ZFR1600000



## Culture medium systems for surface specimen/hygiene monitoring

Product	Description	No. of tests/amount	Art. No.
RIDA®STAMP Coliform	Agar stamp plate for surface monitoring of Coliforms on solid foods and environmental surfaces	50 determinations 25 determinations	HS0411 HS0412
RIDA®STAMP ECC	Agar stamp plate for surface monitoring of E. coli & Coliforms on solid foods and environmental surfaces	50 determinations 25 determinations	HS0431 HS0432
RIDA®STAMP Pseudomonas	Agar stamp plate for surface monitoring of <i>Pseudomonas</i> spp. on solid foods and environmental surfaces	50 determinations 25 determinations	HS2011 HS2012
RIDA®STAMP Salmonella	Agar stamp plate for surface monitoring of Salmonella on solid foods and environmental surfaces	25 determinations	HS0392
RIDA®STAMP S. aureus	Agar stamp plate for surface monitoring of Staphylococcus aureus on solid foods and environmental surfaces	25 determinations	HS0462
RIDA®STAMP Total	Agar stamp plate for surface monitoring of total count on solid foods and environmental surfaces	50 determinations 25 determinations	HS0291 HS0292
RIDA®STAMP Total Desi	Agar stamp plate for surface monitoring of total count in case of presence of desinfectants on solid foods and environmental surfaces	50 determinations 25 determinations	HS1831 HS1832
RIDA*STAMP YM-P	Agar stamp plate for surface monitoring of fungi on solid foods and environmental surfaces	50 determinations 25 determinations	HS0371 HS0372

## Pathogens & bacterial toxins

	DNA preparation		
SureFast® PREP Bacteria	Preparation of bacteria DNA from enrichments	100 preparations	F1021
SureFast® Speed PREP	Speed preparation of bacteria- and parasites-DNA from enrichment cultures and tissue samples	100 preparations	F1054
Bacillus cereus	Qualitative real-time PCR		
SureFast® Bacillus cereus group PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5126
SureFast® Emetic Bacillus cereus PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5127
Campylobacter	Qualitative real-time PCR		
SureFast® Campylobacter PLUS (C. <i>jejuni</i> , C. <i>lari</i> , C. <i>coli</i> )	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5112
Clostridium	Qualitative real-time PCR		
SureFast® Clostridium botulinum Screening PLUS	Qualitative DNA detection Detection of <i>C. botulinum</i> toxin groups A, B, E, F Detection limit: ≤ 50 DNA copies, 1 cfu after enrichment	100 reactions	F5110
SureFast® Clostridium estertheticum PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5160
SureFast® Clostridium perfringens PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5123













## Microbiology/hygiene

## Pathogens & bacterial toxins

Product	Description	No. of tests/amount	Art. No.
Cronobacter	Qualitative real-time PCR		
SureFast® Cronobacter PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5114
SureFast® Cronobacter sakazakii PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5115
E. coli	Qualitative real-time PCR		
SureFast® Escherichia coli PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5157
SureFast® Escherichia coli eae gene PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5104
SureFast® EHEC/EPEC 4plex	Qualitative DNA detection of virulence genes stx1, stx2, eae, ipaH (E. coli/Shigella spp. differentiation)	100 reactions	F5128
SureFast® STEC Screening PLUS	Qualitative DNA detection of virulence factors $stx1$ and $stx2$ Detection limit: $\leq 5$ DNA copies	100 reactions	F5105
SureFast® STEC 4plex	Qualitative DNA detection of 0157, virulence gene stx1/stx2 and eae Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5165
Listeria	Qualitative real-time PCR		
SureFast® Listeria Screening PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5117
SureFast® Listeria monocytogenes PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5113
Salmonella	ELISA microtiter plates		
RIDASCREEN® Salmonella AFNOR RBP 31/01-06/08	Enzyme immunoassay for the determination of Salmonella in food, feed and environmental samples	96 determinations	R4201
	DNA preparation		
SureFast® PREP Salmonella AOAC-RI 041103	DNA preparation of Salmonella	100 preparations	F1007
	Qualitative real-time PCR		
SureFast® Salmonella PLUS AOAC-RI 041103	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5111
SureFast® Salmonella Serotype 3plex	Qualitative DNA detection of S. Typhimurium and S. Enteritidis Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5159
SureFast® Salmonella Species/Enteritidis/Typhimurium 4plex	Qualitative detection of Salmonella species S. Enteritidis and S. Typhimurium Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5166
	Qualitative real-time PCR and DNA preparation		
SureFast® Salmonella ONE MicroVal (2014LR43; ISO 16140-2) AOAC-RI (081803)	Qualitative DNA detection  Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment  Kit includes DNA preparation	100 reactions/ 100 preparations	F5211
Ornithobacterium	Qualitative real-time PCR		
SureFast® ORT PLUS	Qualitative detection of <i>Ornithobacterium</i> rhinotracheale  Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5164



## Pathogens & bacterial toxins

Product	Description	No. of tests/amount	Art. No.
Staphylococcus	ELISA microtiter plates		
RIDASCREEN® SET A, B, C, D, E	Enzyme immunoassay for identification of staphylococcus enterotoxins A, B, C, D and E in food and bacterial cultures  Detection limit: 0.25 ng/ml toxin (0.375 ng/g)	12 determinations Incubation time: 2 hrs 45 min	R4101
RIDASCREEN® SET Total	Enzyme immunoassay for combined detection of staphylococcus enterotoxins (A - E) in food and bacterial cultures Detection limit: 0.25 ng/ml toxin (0.375 ng/g)	96 determinations 48 determinations Incubation time: 2 hrs 45 min	R4105 R4106
	Qualitative real-time PCR		
SureFast® Staphylococcus aureus PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5116
Vibrio	Qualitative real-time PCR		
SureFast® Vibrio 4plex	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment (V. cholerae, V. parahaemolyticus, V. vulnificus)	100 reactions	F5161
SureFast® Vibrio Screening PLUS	Qualitative DNA detection of <i>Vibrio</i> spp. Detection limit: $\leq$ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5118
SureFast® Vibrio parahaemolyticus PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, 1 cfu after enrichment	100 reactions	F5120
Yersinia	Qualitative real-time PCR		
SureFast® Yersinia enterocolitica PLUS	Qualitative DNA detection Detection limit: ≤ 5 DNA copies	100 reactions	F5124
Histomonas (parasites)	Qualitative real-time PCR and DNA preparation		
SureFast® Histomonas meleagridis ONE	Qualitative DNA detection Detection limit: ≤ 5 DNA copies, Kit includes DNA preparation	100 reactions/ 100 preparations	F5213











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## Microbiology/hygiene

#### Viruses

Product	Description	No. of tests/amount	Art. No.
	DNA/RNA preparation		
SureFast® PREP DNA/RNA Virus	DNA/RNA preparation of viruses	100 preparations	F1051
	Real-time reverse transcriptase PCR (qualitative detection	)	
SureFast® Norovirus/Hepatitis A 3plex	Qualitative detection of Norovirus and Hepatitis A Detection limit: ≤ 25 RNA copies	100 reactions	F7124
SureFast® Hepatitis A PLUS	Qualitative detection of Hepatitis A Detection limit: ≤ 25 RNA copies	100 reactions	F7125
SureFast® Hepatitis E PLUS	Qualitative detection of Hepatitis E Detection limit: ≤ 25 RNA copies	100 reactions	F7142
SureFast® Influenza A PLUS	Qualitative detection of influenza virus A Detection limit: ≤ 25 RNA copies	100 reactions	F7103
SureFast® Influenza A H5/H7/H9 4plex	Qualitative detection and differentiation of influenza A-subtypes H5, H7 and H9 Detection limit: ≤ 25 RNA copies	100 reactions	F7139

## Water analysis

	DNA preparation		
SureFast® PREP Aqua	DNA preparation of bacterial cells from water samples	100 preparations	F1023
Legionella	Qualitative real-time PCR		
SureFast® Legionella Screen PLUS	Qualitative DNA detection of <i>Legionella</i> spp. Detection limit: ≤ 5 DNA copies	100 reactions	F5502
SureFast® Legionella pneumophila PLUS	Qualitative DNA detection of <i>Legionella pneumophila</i> Detection limit: ≤ 5 DNA copies	100 reactions	F5501
SureFast® Legionella 3plex	Qualitative DNA detection of <i>Legionella</i> spp. and <i>Legionella pneumophila</i> Detection limit: ≤ 5 DNA copies	100 reactions	F5505
	Qualitative real-time PCR		
SureFast® Parasitic Water Panel 4plex	Qualitative DNA detection of <i>Giardia intestinalis, Entamoeba histolytica</i> und <i>Cryptosporidium</i> spp. Detection limit: ≤ 5 DNA copies	100 reactions	F5506
SureFast® Enterobacteriaceae Screening PLUS	Qualitative DNA detection of <i>Enterobactericeae</i> Detection limit: ≤ 5 DNA copies	100 reactions	F5507
SureFast® Pseudomonas aeruginosa PLUS	Qualitative DNA detection of <i>Pseudomonas aeruginosa</i> , Detection limit: ≤ 5 DNA copies	100 reactions	F5503
AMP/ATP detection	Bioluminescence		
LuciPac® Pen AQUA	Test system for hygiene control in liquid samples (based on detection of ATP/AMP) Reaction tubes with integrated sample stick for use with Lumitester PD-30	100 reactions	ZLA1002672
	Accessories		-
RIDA® Clean Extract	Sample preparation kit for lubricants and paints to be used together with LuciPac® Pen AQUA	20 reactions	ZLPP1002673

<sup>\*</sup> Find more products for microbiological water analysis on page 72 under "Culture medium systems for colony counting and pathogen detection".



### Beverage analysis

Product	Description	No. of tests/amount	Art. No.
Juice	DNA preparation		
GEN-IAL® Simplex® Easy Spin DNA kit	Alicyclobacillus DNA extraction from fruit or vegetable juices or concentrates	50 preparations	SES0050
	Qualitative multiplex real-time PCR		
GEN-IAL® Alicyclobacillus multiplex	DNA Screening of Alicyclobacillus spp., A. acidocaldarius and A. acidoterrestris in fruit juices or concentrates	50 reactions	TPABM 0050
Wine	DNA preparation		
GEN-IAL® Simplex® Easy Wine kit	DNA preparation of wine samples	100 preparations	SEW0100
	Qualitative multiplex real-time PCR		
GEN-IAL® First-Wine PCR Screening	DNA screening and differentiation of wine spoilage bacteria and yeasts: Lactobacillus; Pediococcus; Oenococcus oeni; acetic acid bacteria; yeast	50 reactions	TPWS 0050
GEN-IAL® First-Wine PCR Screening	DNA Screening of wine spoilage bacteria: Lactobacillus; Pediococcus; Oenococcus oeni; acetic acid bacteria	50 reactions	TPWSOH 0050
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA screening and differentiation of wine spoilage bacteria and yeasts: Lactobacillus; Pediococcus; Oenococcus oeni; acetic acid bacteria; yeast High profile: ABI 7500, Agilent MX3005P	96 reactions	QTPWS0096 high
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA screening and differentiation of wine spoilage bacteria and yeasts: Lactobacillus; Pediococcus; Oenococcus oeni; acetic acid bacteria; yeast Low profile: Agilent Aria MX, Bio-Rad CFX96™	96 reactions	QTPWS0096 low
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA screening and differentiation of wine spoilage bacteria and yeasts: Lactobacillus; Pediococcus; Oenococcus oeni; acetic acid bacteria; yeast White strips: Bio-Rad CFX96™, LightCycler® 480	96 reactions	QTPWS0096 white
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA screening and differentiation of wine spoilage bacteria and yeasts: Lactobacillus; Pediococcus; Oenococcus oeni; acetic acid bacteria; yeast Low MG profile: MyGo Pro	96 reactions	QTPWS0096 low MG
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA Screening of wine spoilage bacteria: <i>Lactobacillus; Pediococcus; Oenococcus oeni;</i> acetic acid bacteria High profile: ABI 7500, Agilent MX3005P	96 reactions	QTPWSOH 0096 high
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA Screening of wine spoilage bacteria: <i>Lactobacillus; Pediococcus; Oenococcus oeni;</i> acetic acid bacteria Low profile: Agilent Aria MX, Bio-Rad CFX96™	96 reactions	QTPWSOH 0096 low
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA Screening of wine spoilage bacteria: <i>Lactobacillus; Pediococcus; Oenococcus oeni;</i> acetic acid bacteria White strips: Bio-Rad CFX96 <sup>**</sup> , LightCycler <sup>**</sup> 480	96 reactions	QTPWSOH 0096 white
GEN-IAL® QuickGEN* First-Wine PCR Kit	DNA Screening of wine spoilage bacteria: Lactobacillus; Pediococcus; Oenococcus oeni; acetic acid bacteria Low MG profile: MyGo Pro	96 reactions	QTPWSOH 0096 low MG

<sup>\*</sup> QuickGEN kits deliver a rapid, easy one-step DNA lysis and amplification method. Pre-enriched samples as well as centrifuged or filtrated samples may be used with CSE 0100 or FSE 0100 and subsequent QuickGEN detection kits.

Precoated stripes enable less pipetting steps. Different kits are suitable for different real-time thermocylclers: High profile:ABI 7500, Agilent MX3005P

Low profile: Agilent Aria MX, Bio-Rad CFX96, MyGo Pro

White strips:Bio-Rad CFX96, LightCycler® 480

other block cycler devices may be suitable as well. Information is available on request.









## Microb

## Microbiology/hygiene

### Beverage analysis

Product	Description	No. of tests/amount	Art. No.
Wine	Qualitative real-time PCR		
GEN-IAL® QuickGEN* First-Oenococcus Oeni	Specific DNA detection of <i>Oenococcus oeni</i> High profile: ABI 7500, Agilent MX3005P	48 reactions	QTPOE0048 high
GEN-IAL® QuickGEN* First-Oenococcus Oeni	Specific DNA detection of <i>Oenococcus oeni</i> Low profile: Agilent AriaMX, Bio-Rad CFX96, MyGo Pro	48 reactions	QTPOE0048 low
GEN-IAL® QuickGEN* First-Oenococcus Oeni	Specific DNA detection of <i>Oenococcus oeni</i> White strips: Bio-Rad CFX96, LightCycler® 480	48 reactions	QTPOE0048 white
GEN-IAL® First-Wine Screening Biogene Amine	Specific DNA detection of bacteria forming biogenic amines	50 reactions	BAM0050
Wine/beer	Qualitative real-time PCR		
GEN-IAL® Acetic acid bacteria	Specific DNA detection of acetic acid bacteria	50 reactions	TPA 0050
GEN-IAL® QuickGEN* Acetic acid bacteria	Specific DNA detection of acetic acid bacteria High profile: ABI 7500, Agilent MX3005P	48 reactions	QTPA0048 high
GEN-IAL® QuickGEN* Acetic acid bacteria	Specific DNA detection of acetic acid bacteria Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	48 reactions	QTPA0048 low
GEN-IAL® QuickGEN* Acetic acid bacteria	Specific DNA detection of acetic acid bacteria White strips: Bio-Rad CFX96, LightCycler® 480	48 reactions	QTPA0048 white
GEN-IAL®QuickGEN* First-Yeast PCR Kit Dekkera spp.	Specific DNA detection of <i>Dekkera</i> spp. High profile: ABI 7500, Agilent MX3005P	48 reactions	QTPYD0048 high
GEN-IAL®QuickGEN* First-Yeast PCR Kit Dekkera spp.	Specific DNA detection of <i>Dekkera</i> spp. Low profile: Agilent Aria MX, Bio-Rad CFX96™	48 reactions	QTPYD0048 low
GEN-IAL®QuickGEN* First-Yeast PCR Kit Dekkera spp.	Specific DNA detection of <i>Dekkera</i> spp. White strips: Bio-Rad CFX96™, LightCycler® 480	48 reactions	QTPYD0048 white
GEN-IAL® Dekkera bruxellensis FH	Specific DNA detection of <i>Dekkera bruxellensis</i> (FAM HEX)	50 reactions	TPYDB 0050 FH
GEN-IAL® Dekkera bruxellensis FR	Specific DNA detection of <i>Dekkera bruxellensis</i> (FAM ROX)	50 reactions	TPYDB 0050 FR
GEN-IAL® Dekkera bruxellensis Spartan DX-12	Specific DNA detection of Dekkera bruxellensis	50 reactions	TPYDB 0050 SP
GEN-IAL® Dekkera bruxellensis	Specific DNA detection of <i>Dekkera bruxellensis</i> High profile: ABI 7500, Agilent MX3005P	48 reactions	QTPYDB0048 high
GEN-IAL® Dekkera bruxellensis	Specific DNA detection of <i>Dekkera bruxellensis</i> Low profile: Agilent AriaMX, Bio-Rad CFX96, MyGo Pro	48 reactions	QTPYDB0048 low
GEN-IAL® Dekkera bruxellensis	Specific DNA detection of <i>Dekkera bruxellensis</i> White strips: Bio-Rad CFX96, LightCycler® 480	48 reactions	QTPYDB0048 white
Wine/beer	Qualitative real-time PCR		
GEN-IAL® Zygosaccharomyces bailii	Specific DNA detection of <i>Zygosaccharomyces bailii</i> High profile: ABI 7500, Agilent MX3005P	48 reactions	QTPYZB0048 high
GEN-IAL® Zygosaccharomyces bailii	Specific DNA detection of <i>Zygosaccharomyces bailii</i> Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	48 reactions	QTPYZB0048 low
GEN-IAL® Zygosaccharomyces bailii	Specific DNA detection of <i>Zygosaccharomyces bailii</i> White strips: Bio-Rad CFX96™, LightCycler® 480	48 reactions	QTPYZB0048 white

<sup>\*</sup> QuickGEN kits deliver a rapid, easy one-step DNA lysis and amplification method. Pre-enriched samples as well as centrifuged or filtrated samples may be used with CSE 0100, CSY 0100 or FSE 0100 and subsequent QuickGEN detection kits.



### Beverage analysis

Product	Description	No. of tests/amount	Art. No.
Beer	DNA preparation		•
GEN-IAL®Simplex® Easy DNA kit	DNA preparation of beverage samples	100 preparations	SE 0100
GEN-IAL® QuickGEN* Sample preparation filtration	DNA preparation of beverage samples, filtration	100 preparations	FSE 0100
	DNA preparation with centrifugation without enrichment		
GEN-IAL® QuickGEN* Sample preparation centrifugation	DNA preparation of beverage samples, centrifugation	100 preparations	CSE 0100
GEN-IAL® QuickGEN* Sample preparation in yeast	For beverage samples mainly containing yeast	100 preparations	CSY 0100
Beer – bacteria & yeast	Qualitative multiplex real-time PCR		
GEN-IAL® QuickGEN* First-Beer Differentiation PCR Kit	Multiplex detection (30 species) and identification (19 species) of relevant beer spoilers High profile: ABI 7500, Agilent MX3005P	96 reactions	QTPBD0096 high
GEN-IAL® QuickGEN* First-Beer Differentiation PCR Kit	Multiplex detection (30 species) and identification (19 species) of relevant beer spoilers Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	96 reactions	QTPBD0096 low
GEN-IAL® QuickGEN* First-Beer Differentiation PCR Kit	Multiplex detection (30 species) and identification (19 species) of relevant beer spoilers White strips: Bio-Rad CFX96, LightCycler® 480	96 reactions	QTPBD0096 white
GEN-IAL® QuickGEN* First-Beer yeast and bacteria differentiation	Multiplex detection and identification of beverage spoiling bacteria and yeasts High profile: ABI 7500, Agilent MX3005P	96 reactions	QTPYB0096 high
GEN-IAL® QuickGEN* First-Beer yeast and bacteria differentiation	Multiplex detection and identification of beverage spoiling bacteria and yeasts Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	96 reactions	QTPYB0096 low
GEN-IAL® QuickGEN* First-Beer yeast and bacteria differentiation	Multiplex detection and identification of beverage spoiling bacteria and yeasts White strips: Bio-Rad CFX96™, LightCycler® 480	96 reactions	QTPYB0096 white
GEN-IAL® P1 Screening	DNA screening and differentiation of beer spoiling bacteria and yeasts	50 reactions	PP1T 0050
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and yeasts	50 reactions	QPP1T 0050

<sup>\*</sup> QuickGEN kits deliver a rapid, easy one-step DNA lysis and amplification method. Pre-enriched samples as well as centrifuged or filtrated samples may be used with CSE 0100, CSY 0100 or FSE 0100 and subsequent QuickGEN detection kits.





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## Microbiology/hygiene

## Beverage analysis

Product	Description	No. of tests/amount	Art. No.
Beer – bacteria & yeast	Qualitative multiplex real-time PCR		
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and yeasts High profile: ABI 7500, Agilent MX3005P	48 reactions	QPP1T0048 high
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and yeasts Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	48 reactions	QPP1T0048 low
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and yeasts low MG profile: MyGo Pro	48 reactions	QPP1T0048 low MG
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and yeasts White strips: Bio-Rad CFX96™, LightCycler® 480	48 reactions	QPP1T0048 white
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and Saccharomyces cerevisiae var. diastaticus	50 reactions	QPP1SD 0050
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and <i>Saccharomyces cerevisiae var. diastaticus</i> High profile: ABI 7500, Agilent MX3005P	48 reactions	QPP1SD0048 high
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and Saccharomyces cerevisiae var. diastaticus Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	48 reactions	QPP1SD0048 low
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and Saccharomyces cerevisiae var. diastaticus Low MG profile: MyGo Pro	48 reactions	QPP1SD0048 low MG
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and Saccharomyces cerevisiae var. diastaticus White strips: Bio-Rad CFX96™, LightCycler® 480	48 reactions	QPP1SD0048 white
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and hop resistance genes High profile: ABI 7500, Agilent MX3005P	48 reactions	QPP1HR0048 high
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and hop resistance genes Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	48 reactions	QPP1HR0048 low
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and hop resistance genes Low MG profile: MyGo Pro	48 reactions	QPP1HR0048 low MG
GEN-IAL® QuickGEN* P1 Screening	DNA screening and differentiation of beer spoiling bacteria and hop resistance genes White strips: Bio-Rad CFX96™, LightCycler® 480	48 reactions	QPP1HR0048 white
GEN-IAL® QuickGEN* First-Biofilm	Specific DNA detection of Lactococcus lactis, Leuconostoc mesenteroides and Pichia anomala	50 reactions	QTPBF0050
Beer – bacteria	Qualitative real-time PCR		
GEN-IAL® Pectinatus spp./Megasphaera spp.	Specific DNA detection and differentiation of <i>Pectinatus</i> and <i>Megasphaera</i>	50 reactions	TPPMD 0050
GEN-IAL® Pectinatus spp./Megasphaera spp.	Specific DNA detection and differentiation of <i>Pectinatus</i> and <i>Megasphaera</i> Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	48 reactions	QTPPMD0048 low
GEN-IAL® Enterobacteriaceae	DNA detection of Enterobacteriaceae	50 reactions	TPENT0050

<sup>\*</sup> QuickGEN kits deliver a rapid, easy one-step DNA lysis and amplification method. Pre-enriched samples as well as centrifuged or filtrated samples may be used with CSE 0100, CSY 0100 or FSE 0100 and subsequent QuickGEN detection kits.



### Beverage analysis

Product	Description	No. of tests/amount	Art. No.
Beer – resistance genes	Qualitative real-time PCR	·	
GEN-IAL® QuickGEN* hop resistance genes horA and horC / hitA and orf5	Specific DNA detection of hop resistance genes	50 reactions	QTPHR 0050
Beer – yeast	Qualitative real-time PCR		
GEN-IAL® QuickGEN* First-Yeast PCR Kit Wild Yeast 1	DNA screening and differentiation of wild yeast	50 reactions	QTPWY10050
GEN-IAL® QuickGEN* First-Yeast PCR Kit Wild Yeast 2	DNA screening and differentiation of wild yeast	50 reactions	QTPWY20050
GEN-IAL® QuickGEN* First-Yeast PCR Kit Wild Yeast	DNA screening and differentiation of wild yeast High profile: ABI 7500, Agilent MX3500P	96 reactions	QTPWY0096 high
GEN-IAL® QuickGEN* First-Yeast PCR Kit Wild Yeast	DNA screening and differentiation of wild yeast Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	96 reactions	QTPWY0096 low
GEN-IAL® QuickGEN* First-Yeast PCR Kit Wild Yeast	DNA screening and differentiation of wild yeast White strips: Bio-Rad CFX96™, LightCycler® 480	96 reactions	QTPWY0096 white
GEN-IAL® QuickGEN* First-Yeast differentiation PCR Kit	DNA screening and differentiation of 12 yeasts High profile: ABI 7500, Agilent MX3005P	96 reactions	QYDIF0096 high
GEN-IAL® QuickGEN* First-Yeast differentiation PCR Kit	DNA screening and differentiation of 12 yeasts Low profile: Agilent AriaMX, Bio-Rad CFX96™, MyGo Pro	96 reactions	QYDIF0096 low
GEN-IAL® QuickGEN* First-Yeast differentiation PCR Kit	DNA screening and differentiation of 12 yeasts White strips: Bio-Rad CFX96™, LightCycler® 480	96 reactions	QYDIF0096 white
GEN-IAL® Dekkera anomala	Specific DNA detection of <i>Dekkera anomala</i>	50 reactions	TPYDA 0050
GEN-IAL® Pichia anomala	Specific DNA detection of Pichia anomala (Wickerhamomyces anomalus)	50 reactions	TPYPA 0050
GEN-IAL® Saccharomyces diastaticus	Specific DNA detection of Saccharomyces cerevisiae var. diastaticus	50 reactions	TPYSD 0050
GEN-IAL® Pichia membranaefaciens	Specific DNA detection of Pichia membranaefaciens	50 reactions	ТРҮРМ 0050
GEN-IAL® Bottom fermented yeast	Specific DNA detection of bottom fermented yeast	50 reactions	TPYUG 0050
GEN-IAL® QUICK GEN* Bottom fermented yeast	Specific DNA detection of bottom fermented yeast High profile: ABI 7500, Agilent MX3005P	48 reactions	QTPYUG0048 high
GEN-IAL® QUICK GEN* Bottom fermented yeast	Specific DNA detection of bottom fermented yeast Low profile: Agilent Aria MX, Bio-Rad CFX96™	48 reactions	QTPYUG0048 low
GEN-IAL® QUICK GEN* Bottom fermented yeast	Specific DNA detection of bottom fermented yeast White strips: Bio-Rad CFX96™, LightCycler® 480	48 reactions	QTPYUG0048 white
GEN-IAL® Top fermented yeast	Specific DNA detection of top fermented yeast	50 reactions	TPYOG 0050
GEN-IAL® QUICK GEN* Top fermented yeast	Specific DNA detection of top fermented yeast High profile: ABI 7500, Agilent MX3005P	48 reactions	QTPYOG0048 high
GEN-IAL® QUICK GEN* Top fermented yeast	Specific DNA detection of top fermented yeast Low profile: Agilent Aria MX, Bio-Rad CFX96™	48 reactions	QTPYOG0048 low
GEN-IAL® QUICK GEN* Top fermented yeast	Specific DNA detection of top fermented yeast White strips: Bio-Rad CFX96™, LightCycler® 480	48 reactions	QTPYOG0048 white

<sup>\*</sup> QuickGEN kits deliver a rapid, easy one-step DNA lysis and amplification method. Pre-enriched samples as well as centrifuged or filtrated samples may be used with CSE 0100, CSY 0100 or FSE 0100 and subsequent QuickGEN detection kits.









## Beverage analysis

GEN-IAL® accessories	Real-time PCR		
GEN-IAL® Dekkera bruxellensis Standards	DNA standards for <i>Dekkera bruxellensis</i> quantification	200.000 cfu	DBST 0100
Color Compensation Kit LightCycler® 480	Color compensation kit for multiplex assays	5 reactions	PP1TCC 0005
Color Compensation Kit LightCycler® 2.0	Color compensation kit for multiplex assays	5 reactions	CCFH 0005
Washing solution	Washing solution for SEW 0100	43 ml	WS 0100

## Test systems for cleaning control

AMP/ATP detection	Bioluminescence		
LuciPac® Pen	Test system for hygiene control on surfaces (based on detection of ATP/AMP) Reaction tubes with integrated swab for use with Lumitester PD-30	100 determinations	ZLP1002667
Protein tests	Swab tests		
RIDA®CHECK	Colorimetric test, ready-to-use swabs for the detection of protein residues on surfaces	100 determinations 40 determinations	R1091 R1092



	ELISA	Dry medium plates	DNA prep. + real-time PCR	Direct stamp plates	Swab tests
	RIDASCREEN®	Compact Dry	SureFast®/ GEN-IAL®	RIDA®STAMP	RIDA®CHECK
Bacterial toxins					
Staphylococcal enterotoxin (Toxins A - E)	•				
Staphylococcal enterotoxin (Total)	•**				
Pathogens					
Bacillus cereus spp.		•*	•		
emetic Bacillus cereus			•		
Campylobacter			•		
Clostridium botulinum, C. estertheticum, C. perfringens			•		
Cronobacter spp., Cronobacter sakazakii			•		
EHEC/EPEC/STEC Screening			•		
Escherichia coli eae gene			•		
Legionella spp., Legionella pneumophila			•		
Listeria monocytogenes			•		
MRSA			•		
Parasitic Water Panel 4plex			•		
Pseudomonas aeruginosa		•	•		
Salmonella	*		*	•	
Salmonella Serotype enteritidis & typhimurium					
Staphylococcus aureus		•*			
Vibrio spp., V. parahaemolyticus, V. cholerae, V. vulnificus				·	
Yersinia enterocolitica		·			
Indicator Organism					
Coliform bacteria		•*		•	
Enterobacteriaceae		*			
Enteropacienaceae		*			
		*			
Escherichia coli		,		•	
Listeria spp.		•	•		
Pseudomonas spp.			_	•	
Staphylococcus aureus		•*	•	•	
Total count		•*		•	
Total count in tea products		•			
Total count in water samples		•			
Vibrio spp.		•	•		
Yeasts & Molds		•*		•	
Virus					
Influenza A			•		
Hepatitis A			•		
Hepatitis E			•		
Norovirus I & II			•		
Beverage Spoilers					
Bacteria screening & Bacteria species			•		
Yeasts screening & Yeast species			•		
Biofilm formation species			•		
Rapid Hygiene Monitoring					
ATP/AMP					•
Protein Test					•

<sup>\*</sup> Officially validated test (AFNOR/MICROVAL/AOAC-RI)

 $<sup>\</sup>hbox{\tt ** Officially validated by the European Reference Laboratory for Coagulase positive Staphylococci}$