GEN-AL

PRODUCTS FOOD, FEED, BEVERAGES

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GEN-IAL Version 11/2017

First-DNA all-tissue Kit



The First-DNA all-tissue Kit is *one single system* that makes DNA extraction possible from various substrates such as blood, urine, semen, cell culture, tissue embedded in paraffin, hair, bones, stains, plant and animal tissue, mouse tails, food, bacteria, yeast, fungi etc. without the use of toxic substances. High yields of quality DNA can be obtained, the mean purity of the isolated DNA, determined by the A260/A280 ratio, is 1.8-1.9. There is no loss of DNA by columns and the eluted DNA is well suited for PCR, sequencing, RFLP etc.

Art. No.: D 0102000 (10 preparations, trial Kit) D 0502000 (50 preparations) D 1002000 (100 preparations) D 5002000 (500 preparations) L1DNA050 (extra Lysis buffer 1 for 50 preparations) L1DNA100 (extra Lysis buffer 1 for 100 preparations)

Simplex[®] Easy DNA Kit



In 15 minutes DNA from bacteria and yeast

The Simplex Easy DNA Kit is an extremely fast and easy DNA-Extraction from bacteria and yeasts. It is also approved for mouse tails and epithelial swaps. DNA is well suited for PCR, sequencing and more.

DNA-Extraction in 5 steps

- 1. Centrifuge sample
- 2. Remove supernatant
- 3. Add Simplex[®] Easy reagent
- 4. Incubate sample at 95 °C
- 5. Centrifuge sample

Advantages

- > DNA-extraction in one single vessel
- No contamination risk
- No toxic solutions
- DNA-cleaning is possible
- Universal applications
- Low material and instrument costs

Art. No.: SE 0010 (10 preparations, trial Kit) SE 0100 (100 preparations)

Simplex[®] Easy Wine Kit



In 40 minutes DNA from bacteria and yeast

The Simplex[®] Easy Wine Kit is an extremely fast and easy method for isolation of DNA from bacteria and yeasts out of wine. It is particularly suitable for detection of wine spoilage microorganisms like e.g. *Dekkera bruxellensis*, *Oenococcus oeni* or lactobacilli.

DNA-Extraction in 6 steps:

- 1. Centrifuge sample
- 2. Purify sample by washing (removal of inhibitors)
- 3. Remove the washing solution after centrifugation
- 4. Add Simplex[®] Easy Wine reagent
- 5. Incubate sample at 95 °C
- 6. Centrifuge sample

Advantages

- DNA-extraction in one single reaction vessel
- No inhibition by washing the sample
- No contamination risk
- High efficiency
- No loss of DNA
- Fast and easy handling
- Universal applications
- > Low material and instrument costs

Art. No.: SEW 0100 (100 preparations) WS 0100 (100 preparations)

Simplex[®] Easy Spin Food DNA Kit



The Simplex[®] Easy Spin Food DNA Kit is a fast and optimal DNA-extraction method for food, feed, plant and animals. The use of spin columns and two cleaning steps guarantee a pure, clean and PCR-suitable DNA used for e.g. detection of GMO, allergenes, animal identity,....

DNA-Extraction in 7 steps:

- 1. Resuspend sample in lysis buffer and incubate 30 min. 65 °C
- 2. Centrifuge sample
- 3. Add binding buffer and transfer to spin column, spin 30 sec
- 4. Remove inhibitors with washing buffer
- 5. Purify DNA with cleaning buffer
- 6. Spin dry 2 min.
- 7. Elute DNA with preheated Elution buffer

Advantages

- Very clean DNA
- Fast and easy handling
- Universal applications
- Long storage of DNA is possible

Art. No.: SEFS 0050 (50 preparations

Simplex[®] Easy Spin Bacterial DNA Kit



The Simplex[®] Easy Spin Bacterial DNA Kit is a very fast and easy method for isolation of DNA from bacteria in food and feed after pre-enrichment. The use of spin columns without further cleaning steps results in sufficiently clean DNA suitable for further applications like PCR.

DNA-Extraction in 4 steps:

- 1. Centrifuge preenriched sample and remove media
- 2. Resuspend the pellet in lysis buffer and incubate 30 min. 95 °C
- 3. Add binding buffer and transfer to spin column, spin 30 sec
- 4. Elute DNA with preheated Elution buffer

Advantages

- Fast and easy DNA-extraction
- Cleaning by spin column
- No contamination risk
- Universal applications
- Long storage of DNA is possible

Art. No.: SESB 0050 (50 preparations)

Simplex[®] Easy Spin Legionella Kit



The Simplex[®] Easy Spin Legionella Kit is a very fast and easy method for isolation of DNA from *Legionella spp.* from drinking water, cooling- and waste water.

DNA-Extraction in 4 steps:

- 1. Centrifuge the water sample
- 2. Resuspend the pellet in lysis buffer and incubate 10 min. at 95°C
- 3. Add binding buffer and transfer to spin column, spin 30 sec.
- 4. Elute DNA with preheated Elution buffer

Advantages

- > Suitable for all samples (drinking water, cooling- and wastewater)
- > High quality *Legionella* DNA by using column technology
- > The system provides all reagents necessary for extraction from 50 samples

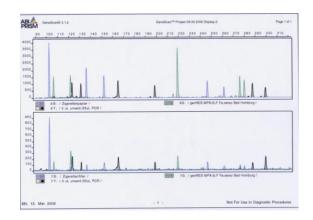
Art. No.: SESL 0050 (50 preparations)

First-Magnetic Forensic Kit

DNA-Extraction from forensic material suitable for automation

The First-Magnetic Forensic Kit is developed for automatic genomic DNA-extraction from various forensic materials. DNA is well suited for STR, SNP, sequencing etc.

- swaps (buccal, mucosa, vagina, etc.)
- blood stains
- hair
- cigarette
- contact stains (e.g. from glass, sticky tape, etc.)



STR-analysis of cigarette paper (up) and cigarette filter (down) with genRES MPX-2LF (SERAC)

The method is based on biomagnetic separation of genomic/mitochondrial DNA: After preparing the lysate, the DNA is bound to magnetic beads. The rest of cell material and other contaminants is washed away. The isolated DNA is eluted in TE or H_2O . The regular volume is 50 µL.

Art. No.: MFOR 0010 (10 preparations, trial Kit) MFOR 0100 (100 preparations) MFOR 0500 (500 preparations)

First-Magnetic Food Kit



DNA-Extraction from food, feed and beverages

The First-Magnetic Food Kit is developed for genomic DNA-extraction from various materials and is especially approved for very complex and highly processed products. The DNA is well suited for PCR, sequencing, etc.

Applications:

- highly processed products: e.g. starch, lecithin, soy sauce, tomato puree
- beverage source materials: e.g. concentrates, fruit puree
- dairy products: e.g. milk and milk products
- feed: e.g. forage cereals, spent hops (treber), fattening feed

The method is based on biomagnetic separation of genomic DNA. After preparing the lysate, the DNA is bound to magnetic beads. The rest of cell material and other contaminants is washed away. The isolated DNA is eluted in TE or H_2O . The regular volume is 50 µL.

Art. No.: FMF 0010 (10 preparations, trial Kit) FMF 0100 (100 preparations)

First-Magnetic Milk Kit



DNA-Extraction from milk and milk products

The First-Magnetic Milk Kit is developed for genomic DNA-Extraction especially from milk and milk products. The DNA is well suited for PCR, sequencing, etc.

Applications:

- milk, raw milk
- yoghurt
- quark
- cheese, cream cheese
- pudding

The method is based on biomagnetic separation of genomic DNA. After preparing the lysate, the DNA is bound to magnetic beads. The rest of cell material and other contaminants is washed away. The isolated DNA is eluted in TE or H_2O . The regular volume is 50 µL.

Art. No.: FMM 0010 (10 preparations, trial Kit) FMM 0100 (100 preparations)

First-Beer Magnetic DNA Kit

Microorganism DNA-Extraction from beverages

The First-Beer Magnetic DNA Kit is developed for bacterial and yeast DNA-Extraction especially from beverages.

Applications:

- beer
- beer mixing drinks
- juices
- wines

The method is based on biomagnetic separation of genomic DNA. After preparing the lysate, the DNA is bound to magnetic beads. The rest of cell material and other contaminants is washed away. The isolated DNA is eluted in TE or H_2O . The regular volume is 50 µL.

The DNA extracted with this Kit is suitable for all real-time PCR assays, e.g. First-Beer PCR Kits: P1 Hyb-Probe-Screening or First-Yeast PCR Kits.

Art. No.: FBD 0010 (10 preparations, trial Kit) FBD 0100 (100 preparations)

First-Salmonella DNA-Extraction buffer

First-Salmonella DNA-extraction buffer for rapid thermic cell lysis after pre-enrichment according to §64 LFGB 00.00.98.

Art. No.: FSD 0100 (100 preparations)

QuickGEN Sample Preparation Kits

The QuickGEN procedure allows a complete and fast analysis of beverage spoilers without preenrichment and time consuming sample preparation. The system is suited to the analysis in the own company lab as well as for the mobile application on site.

- Detection of beer spoilers in larger volume beer
- No sample pre-enrichment
- Fast two-step system available in two versions:

A. Membrane Filtration (FSE)

- 1. Filtrate beer sample up to 1 Liter
- 2. Add QuickGEN buffer to the filter
- 3. Lysis and PCR in one step

B. Centrifugation (CSE)

- 1. Centrifugate 30 mL beer sample
- 2. Add QuickGEN buffer
- 3. Lysis and PCR in one step

C. Syringe Filtration for dispensing equipment (SFSE)

- 1. Filtrate beer sample through a syringe (volume depends on beer type)
- 2. Add QuickGEN buffer to the filter
- 3. Lysis and PCR in one step

Special real-time PCR Kits detect and identify microorganisms directly out of beer (e.g. QPP1T, QTPBD). The detection limit is approximately 100 cfus.

- Art. No.: FSE 0050 (50 preparations)
- Art. No.: CSE 0050 (50 preparations)
- Art. No.: SFSE 0050 (50 preparations)

Reference material

All-Screen reference material	Reference material from s	soy and corn	RF-6x-mix	500
	meal with p35S, Tnos, pa	t, bar, pFMV,		mg
	CTP2-CP4EPSPS	500mg		

PCR-Detection Kits

Colour Compensation Kits for real-time PCR

Product	Description	Art. No.	Rxn.
LC 2.0 Colour Compensation (LightCycler [®] 2.0)	Colour Compensation for FAM/HEX labelled TaqMan™ Duplex systems	CC FH 0005	5
LC 480 Colour Compensation TaqMan™ (LightCycler [®] 480)	Colour Compensation for TaqMan™ labelled systems	CC LC480 0005	5

genControl[®]-GMO-Kits

All PCR-Kits are available for different real-time PCR machines on request

Qualitative real-time PCR, if not indicated (FAM)

Product	Description	Art. No.	Rxn.
First-Plant & internal control	Plant in general, single copy (FAM), incl. internal Inhibition-Control (HEX)	PPLANT 0050	50
First-Plant & internal control	Plant in general, single copy (FAM), incl. internal Inhibition-Control (HEX	PPLANT 0100	100
CaMV	Cauliflower Mosaik Virus	RT-CaMV-25	25
CaMV	Cauliflower Mosaic Virus	RT-CaMV-50	50
Duplex Virus	Duplex Cauliflower Mosaik Virus and Figwort Mosaic Virus (FAM/HEX)	RT-Duplex-Virus-25	25
Duplex Virus	Duplex Cauliflower Mosaik Virus and Figwort Mosaic Virus (FAM/HEX)	RT-Duplex-Virus-50	50
p35S/T-nos Duplex- Screening	CaMVp35S/T-nos -duplex PCR (FAM/HEX)	RTO-duplex-screen-50	50
p35S/T-nos Duplex- Screening	CaMVp35S/T-nos -duplex PCR (FAM/HEX)	RTO-duplex-screen-100	100
pat/bar Duplex- Screening	pat/bar -duplex PCR(FAM/HEX)	RTO-pat/bar duplex-50	50
pat/bar Duplex- Screening	pat/bar -duplex PCR (FAM/HEX)	RTO-pat/bar duplex-100	100
P-NOS-nptII Screening	P-NOS-nptII -PCR	RTO-pnos-nptII-50	50
P-NOS-nptII Screening	P-NOS-nptII -PCR	RTO-pnos-nptII-100	100
cry1Ab/Ac and P-nos Duplex- Screening	Cry1Ab/Ac / Pnos duplex PCR (FAM/HEX)	RT-duplex-cry1A/P-nos- 50	50
cry1Ab/Ac and P-nos Duplex- Screening	Cry1Ab/Ac / Pnos duplex PCR (FAM/HEX)	RT-duplex-cry1A/P-nos- 100	100

RT-triplex I p35S/T-nos/EPSPS	p35S/T-nos/CTP2-CP4EPSPS triplex PCR (FAM/HEX/CY5)	RT-Triplex I -50	50
RT-triplex I p35S/T-nos/EPSPS	p35S/T-nos/CTP2-CP4EPSPS triplex PCR (FAM/HEX/CY5)	RT-Triplex I -100	100
RT-triplex II p35S/T-nos/pFMV	p35S/T-nos/pFMV triplex PCR (FAM/HEX/CY5)	RT-Triplex II -50	50
RT-triplex II p35S/T-nos/pFMV	p35S/T-nos/pFMV triplex PCR (FAM/HEX/CY5)	RT-Triplex II -100	100
RT-triplex III p35S/T-nos/EPSPS & internal Control	p35S/T-nos/ CTP2-CP4EPSPS triplex PCR plus IC (FAM/HEX/ROX/CY5)	RT-Triplex III -50	50
RT-triplex III p35S/T-nos/EPSPS & internal Control	p35S/T-nos/ CTP2-CP4EPSPS triplex PCR plus IC (FAM/HEX/ROX/CY5)	RT-Triplex III -100	100
RT-triplex IV p35S/T-nos/pFMV & internal Control	p35S/T-nos/pFMV triplex PCR plus IC (FAM/HEX/ROX/CY5)	RT-Triplex IV -50	50
RT-triplex IV p35S/T-nos/pFMV & internal Control	p35S/T-nos/pFMV triplex PCR plus IC (FAM/HEX/ROX/CY5)	RT-Triplex IV -100	100
RT-triplex V bar/pat/CTP2-CP4-EPSPS	RT-triplex V: bar/pat/CTP2-CP4-EPSPS (FAM/HEX/Cy5)	RT-triplex V 50	50
RT-triplex V bar/pat/CTP2-CP4-EPSPS	RT-triplex V: bar/pat/CTP2-CP4-EPSPS (FAM/HEX/Cy5)	RT-triplex V 100	100
RT-triplex VI bar/pat/P-nos	RT-triplex V: bar/pat/P-nos (FAM/HEX/Cy5)	RT-triplex VI 50	50
RT-triplex VI bar/pat/P-nos	RT-triplex V: bar/pat/P-nos (FAM/HEX/Cy5)	RT-triplex VI 100	100
RT-triplex VII bar/pat/pFMV	RT-triplex VII: bar/pat/pFMV (FAM/HEX/Cy5)	RT-triplex VII 50	50
RT-triplex VII bar/pat/pFMV	RT-triplex VII: bar/pat/pFMV (FAM/HEX/Cy5)	RT-triplex VII 100	100
RR-Soya	GTS40-3-2 (RoundupReady™)-soya	RT-RR-50	50
RR2-Soya	MON89788 (RoundupReady2™)-soya	RT-RR2-25	25
RR2-Soya	MON89788 (Roundup Ready2™)-soya	RT-RR2-50	50
A2704-12-Soya	A2704-12 (LibertyLink™)-soya	RT-A2704-Soya-25	25
A2704-12-Soya	A2704-12 (LibertyLink™)-soya	RT-A2704-Soya-50	50
A5547-127-Soya	A5547-127 (LibertyLink™)-soya	RT-A5547-Soya-25	25
A5547-127-Soya	A5547-127 (LibertyLink™)-soya	RT-A5547-Soya-50	50
Triplex-Soya I A2704/A5547/DP356043 all with p35S positive	Triplex PCR A2704-12 / A5547-127 / DP356043-5 (FAM/HEX/CY5)	RT-Trip-soyl-25	25
Triplex-Soya I A2704/A5547/DP356043	Triplex PCR A2704-12 / A5547-127 / DP356043-5 (FAM/HEX/CY5)	RT-Trip-soyl-50	50
Triplex-Soya II DP305423/CV127/MON87701 All without screening markers	Triplex PCR DP305423-1 /BPS-CV127-9 / MON87701 (FAM/HEX/CY5)	RT-Trip-soyll-25	25
Triplex-Soya II DP305423/CV127/MON87701	Triplex PCR DP305423-1 /BPS-CV127-9 / MON87701 (FAM/HEX/CY5)	RT-Trip-soyII-50	50
Triplex-Soya III MON87708/MON87769/DAS68416 All without screening markers	Triplex PCR MON87708 / MON87769 / DAS68416 (FAM/HEX/CY5)	RT-Trip-soyIII-25	25
Triplex-Soya III MON87708/MON87769/DAS68416 All without screening markers	Triplex PCR MON87708 / MON87769 / DAS68416 (FAM/HEX/CY5)	RT-Trip-soyIII-50	50

Hexaplex Soya I DP305423/CV127/MON87701 MON87708/MON87769/DAS68416	Hexaplex Soya I FAM:DP305423/CV127/MON87701 HEX:MON87708/MON87769/DAS68416	RT-Hexaplex-Soyal-25	25
Hexaplex Soya I DP305423/CV127/MON87701 MON87708/MON87769/DAS68416	Hexaplex Soya I FAM:DP305423/CV127/MON87701 HEX:MON87708/MON87769/DAS68416	RT-Hexaplex-Soyal-50	50
	EH92-527-1 (Amflora™)-potato	RT-Amflora-25	25
EH92-527-1-Potato EH92-527-1-Potato	, , , , , , , , , , , , , , , , ,	RT-Amflora-50	
	EH92-527-1 (Amflora™)-potato		50
RT73-Canola	RT73 (RoundupReady™)-canola	RT-RT73-50	50
Triplex-Canola I Ms8/T45/Rf3	Triplex PCR Ms8 / T45 / Rf3 (FAM/HEX/CY5)	RT-Trip-canola1-25	25
Triplex-Canola I Ms8/T45/Rf3	Triplex PCR Ms8 / T45 / Rf3 (FAM/HEX/CY5)	RT-Trip-canola1-50	50
H7-1 Beet & internal control	H7-1-beet /FAM) internal control (HEX)	RT-H7-1-beet-25	25
H7-1 Beet & internal control	H7-1-beet /FAM) internal control (HEX)	RT-H7-1-beet-50	50
MON810-Maize	MON810 (YieldGuard™)-maize	RT-MON810-50	50
Bt176-Maize	Bt 176 (Maximizer™)-maize	RT-Bt176-25	25
Bt176-Maize	Bt 176 (Maximizer™)-maize	RT-Bt176-50	50
Bt11-Maize	Bt 11-maize	RT-Bt11-25	25
Bt11-Maize	Bt 11-maize	RT-Bt11-50	50
T25-Maize	T25-maize	RT-T25-25	25
T25-Maize	T25-maize	RT-T25-50	50
MON88017-Maize	MON88017 (Rootworm™)-maize	RT-MON88017-25	25
MON88017-Maize	MON88017 (Rootworm™)-maize	RT-MON88017-50	50
GA21-Maize	GA21 (RoundupReady™)-maize	RT-GA21-25	25
GA21-Maize	GA21 (RoundupReady™)-maize	RT-GA21-50	50
TC1507-Maize	TC1507 (Herculex™)-maize	RT-TC1507-25	25
TC1507-Maize	TC1507 (Herculex™)-maize	RT-TC1507-50	50
NK603-Maize	NK603 (RoundupReady™)-maize	RT-NK603-25	25
NK603-Maize	NK603 (RoundupReady™)-maize	RT-NK603-50	50
MIR604-Maize	MIR604-maize	RT-MIR604-25	25
MIR604-Maize	MIR604-maize	RT-MIR604-50	50
MIR162-Maize	MIR162-maize	RT-MIR162-25	25
MIR162-Maize	MIR162-maize	RT-MIR162-50	50
MON863-Maize	MON863-maize	RT-MON863-25	25

MON863-Maize	MON863-maize	RT-MON863-50	50
E3272-Maize	E3272-Maize (Event 3272 maize)	RT-E3272-25	25
E3272-Maize	E3272-Maize (Event 3272 maize)	RT-E3272-50	50
DAS59122-Maize	DAS59122-7- maize	RT-DAS59122-25	25
DAS59122-Maize	DAS59122-7- maize	RT-DAS59122-50	50
CBH351-Maize	CBH351-Maize (StarLink)	RT-CBH351-25	25
CBH351-Maize	CBH351-Maize (StarLink)	RT-CBH351-50	50
GMO-Soy	RR-, RR2-, A2704-12-, A5547-127-soya and soya-reference (5 x 25 rxn)	RT-GMSOY-25	25
GMO-Corn	MON810-, T25-, Bt11-, Bt176-, GA21-, MON88017-, TC1507-maize and maize- reference (8 x 25 rxn)	RT-GMCORN-25	25

PCR-Detection Kits

genControl[®]-GMO Kits

All PCR Kits are available for different real-time PCR machines on request

Real-time PCR, <u>quantitative</u> (FAM)

Product	Description	Art. No.	Rxn.
p35S/ Soya Quant	CaMVp35S Quantification in Soya	Qp35S-Soya-50	50
p35S/ Soya Quant	CaMVp35S Quantification in Soya	Qp35S-Soya-100	100
p35S/ Maize Quant	CaMVp35S Quantification in Maize	Qp35S-Maize-50	50
p35S/ Maize Quant	CaMVp35S Quantification in Maize	Qp35S-Maize-100	100
RR-Soya Quant	GTS40-3-2 (RoundupReady™) Soya Quantification in Soya	QRR-50	50
RR-Soya Quant	GTS40-3-2 (RoundupReady™) Soya Quantification in Soya	QRR-100	100
RR2-Soya Quant	MON89788 (RoundupReady2™) Soya Quantification in Soy	QRR2-50	50
RR2-Soya Quant	MON89788 (RoundupReady2™) Soya Quantification in Soy	QRR2-100	100
MON810-Maize Quant	MON810-Maize Quantification in Maize	QMON810-50	50
MON810-Maize Quant	MON810-Maize Quantification in Maize	QMON810-100	100
Bt176-Maize Quant	Bt176-Maize Quantification in Maize	QBt176-50	50
Bt176-Maize Quant	Bt176-Maize Quantification in Maize	QBt176-100	100
Bt11-Maize Quant	Bt11-Maize Quantification in Maize	QBt11-50	50
Bt11-Maize Quant	Bt11-Maize Quantification in Maize	QBt11-100	100

T25-Maize Quant	T25-Maize Quantification in Maize	QT25-50	50
T25-Maize Quant	T25-Maize Quantification in Maize	QT25-100	100

PCR-Detection Kits

Microorganisms

All PCR Kits are available for different real-time PCR machines on request Bacteria and yeast Screening with differentiation

Product	Description	Art. No.	Rxn.
First-Beer Differentiation PCR Kit	Multiplex detection and identification of beer spoilage microorganisms	TPBD 0096 LC480 TPBD 0096	96
QuickGEN First-Beer Differentiation PCR Kit	Multiplex detection and identification of beer spoilage microorganisms in combination with FSE 0050 or CSE 0050	QTPBD 0096 LC480 QTPBD 0096	96
P1 Hyb Probe Screening LC 2.0 (FRET)	Multiplex PCR detection of beer- spoiling bacteria with yeast/without yeast (LC640, 610, 670, 705)	PP1H 0050 LC 2.0/ PP1HoH 0050 LC 2.0	50
P1 TaqMan Screening FAM, 610/ROX, HEX, 660/CY5 Spartan (FAM, ROX)	MultiplexTaqMan-PCR detection of beer-spoiling bacteria and yeast	PP1T 0050/0100 V 2.0 PP1T 0050 SP V 2.0	50/100 50
P1 TaqMan Screening without yeast FAM, 610/ROX, HEX Spartan (FAM, ROX)	MultiplexTaqMan-PCR detection of beer-spoiling bacteria without yeast	PP1ToH 0050 V 2.0 PP1ToH 0050 SP V 2.0	50
P1 TaqMan Screening without yeast FAM, 610/ROX, HEX Spartan (FAM, ROX)	MultiplexTaqMan-PCR detection of beer-spoiling bacteria without yeast	PP1ToH 0050 V 2.0 PP1ToH 0050 SP V 2.0	50
QuickGEN PP1T Screening	Multiplex TaqMan-PCR detection of beer-spoiling bacteria and yeast in combination with FSE 0050 or CSE 0050	QPP1T 0050/0100 V 2.0 QPP1T 0050 SP V 2.0	50/100 50
QuickGEN PP1T OH Screening	Multiplex TaqMan-PCR detection of beer-spoiling bacteria in combination with FSE 0050 or CSE 0050	QPP1T OH 0050 V 2.0 QPP1T OH 0050 SP V 2.0	50
PPA1 TaqMan Screening Spartan (FAM, ROX)	MultiplexTaqMan-PCR detection of beer-spoiling bacteria, yeast and acetic acid bacteria	PPA1T 0050 SP V 2.0	50
Lactobacilli/Pediococci FAM, HEX Spartan (FAM, ROX)	Detection of Lactobacilli and Pediococci	TLP 0050 TLP 0050 SP	50
First-PCR yeast and bacteria differentiation	Multiplex TaqMan-PCR for differentiation of bacteria and yeast	TPYB 0096 LC480 TPYB 0096	96
First-Wine PCR Screening	Detection of Lactobacilli, Pediococci, Oenococcus oeni, Acetic acid bacteria, Yeast universal	TPWS 0050	50

Bacteria, qualitative (FAM/HEX) with Inhibition-Control

Product	Description	Art. No.	Rxn.
Alicyclobacillus spp.	TaqMan [™] -Detection	TPAB 0050	50
Alicyclobacillus multiplex (FAM, HEX, CY5, ROX)	TaqMan [™] -Detection and Differentiation of <i>A. spp</i> , <i>A. acidoterrestris, A. acidocaldarius</i>	TPABM 0050 R	50
Acetic acid bacteria	TaqMan™-Detection	TPA 0050	50
Biogenic amine producing bacteria	TaqMan™-Detection	BAM 0050	50
Lactobacillus amylolyticus/ reuteri	TaqMan™-Differentiation	TPLAR 0050	50
Lactobacillus brevis, L.brevisimilis	TaqMan [™] -Detection	TPLB 0050	50
Lactobacillus brevis/ lindneri / casei, paracasei	TaqMan™-Differentiation (FAM, HEX, Bodipy)	TLBCL 0048 ABI	48
Lactobacillus buchneri, parabuchneri	TaqMan™-Detection	TPLBU 0050	50
Lactobacillus casei, paracasei	TaqMan™Detection	TPLCP 0050	50
Lactobacillus casei, paracasei, rhamnosus, zeae	TaqMan™-Detection	TPLCR 0050	50
Lactobacillus collinoides/brevis	FRET-Detection with Differentiation (LC 640)	HPLBC 0050	50
Lactobacillus collinoides/brevis/lindneri	FRET-Detection with Differentiation (LC 640, 705)	HPLBCL 0050	50
Lactobacillus collinoides, paracollinoides	TaqMan™-Detection	TPLC 0050	50
Lactobacillus coryniformis	TaqMan [™] -Detection	TPLCO 0050	50
Lactobacillus lindneri	TaqMan™-Detection	TPLL 0050	50
Lactobacillus perolens	TaqMan [™] -Detection	TPLPER 0050	50
Lactobacillus plantarum, parapl., pentosus	TaqMan [™] -Detection	TPLP 0050	50
Lactobacillus rossiae	TaqMan™-Detection	TPLR 0050	50
Megasphaera cerevisiae	TaqMan [™] -Detection	TPM 0050	50
Oenococcus oeni	TaqMan [™] -Detection	TPOe 0050	50
Pectinatus cerevisiiphilus	TaqMan [™] -Detection	TPPC 0050	50
Pectinatus frisingensis	TaqMan [™] -Detection	TPPF 0050	50
Pectinatus spp.	FRET-Detection TaqMan™-Detection	HPP 0050 TPP 0050	50
Pectinatus spp. / Megasphaera spp.	FRET-Detection with Differentiation (LC610, 705)	HPPM 0050	50
Pectinatus spp. and Megasphaera spp.	TaqMan [™] - Detection (FAM)	TPPM 0050	50
Pediococcus damnosus	TaqMan [™] -Detection	TPPD 0050	50
Selenomonas lacticifex	FRET-Detection	HPSEL 0050	50
Zymomonas mobilis	FRET-Detection	HPZYM 0050	50

Pathogene Bacteria, qualitative with Inhibition-Control

Product	Description	Art. No.	Rxn.
First-Campylobacter jejuni with internal Control	TaqMan [™] -Detection (FAM, HEX)	CJE 0050	50
First-Campylobacter jejuni Plus Kit: Incl. DNA-extraction Kit	TaqMan™-Detection (FAM, HEX)	SECJE 0200	200
Campylobacter jejuni Complete Kit: ready to use PCR, incl. DNA-extraction Kit	TaqMan™-Detection (FAM, HEX)	SECJEC 0200	200
Campylobacter diff. PCR (jejuni, lari and coli differentiated) with internal Control)	TaqMan™- Differentiation (FAM, JOE, ROX, CY5)	CAMPD 0050	50
Campylobacter diff. Complete: ready to use PCR, incl. DNA-extraction Kit	TaqMan™- Differentiation (FAM, JOE, ROX, CY5)	SECAMPDC 0050	200
Campylobacter PCR (jejuni, lari and coli/ FAM) with internal Control (JOE)	TaqMan™-Detection (FAM, JOE)	CAMP 0050	50
Campylobacter Plus Kit, incl. DNA-extraction Kit	TaqMan™-Detection (FAM, JOE)	SECAMP 0200	200
Campylobacter Complete Kit ready to use PCR, incl. DNA-extraction Kit	TaqMan™-Detection (FAM, JOE)	SECAMPC 0200	200
First-Enterobacteriaceae PCR	TaqMan™-Detection (FAM, HEX)	ENT 0050	50
Salmonella enterica PCR with internal Control	TaqMan™-Detection (FAM, HEX)	PHS 0050	50
Salmonella Plus Kit, incl. DNA-extraction Kit	TaqMan™-Detection (FAM, HEX)	FSDPHS 0200	200
Salmonella Complete Kit ready to use, incl. DNA-extraction Kit	TaqMan™-Detection (FAM, HEX)	FSDPHSC 0200	200
First-Legionella Multiplex PCR Kit	Real-time PCR-Kit for detection and identification of <i>Legionella spp. and</i> <i>Legionella pneumophila</i> (FAM, HEX, CY5)	TPLEGM 0050	50
Listeria spp. and Listeria monocytogenes multiplex PCR with internal Control	TaqMan™-Differentiation (FAM, JOE, CY5)	LIST 0050	50
Listeria spp. Plus Kit, Listeria spp. + L. monocyt. incl. DNA-extraction Kit	TaqMan™-Differentiation (FAM, JOE, CY5)	SELIST 0200	200
Listeria Complete Kit, Listeria spp. + L. monocyt. ready to use PCR, incl. DNA-extraction Kit	TaqMan™-Differentiation (FAM, JOE, CY5)	SELISTC 0200	200
Listeria monocytogenes with internal Control	TaqMan™-Detection (FAM, HEX)	LMONO 0050	50
Listeria monocytogenes Plus Kit, incl. DNA-extraction Kit	TaqMan™-Detection (FAM, HEX)	SELMONO 0200	200
Listeria monocytogenes Complete Kit, ready to use, incl. DNA-extraction Kit	TaqMan™-Detection (FAM, HEX)	SELMONOC 0200	200

PCR-Detection Kits

Microorganisms

All PCR-Kits are available for different real-time PCR machines on request

Yeast Screening with differentiation:

Product	Description	Art. No.	Rxn.
Hyb Probe Screening LC 2.0	Multiplex FRET-PCR Detection and	PYHYB 0050 LC 2.0	50
	Differentiation of Saccharomyces		
	spp., Dekkera spp., Pichia anomala		
	for LC 2.0		
	(LC640, 610, 705)		
Hyb Probe Screening LC 480	Multiplex FRET-PCR Detection and	PYHYB 0050 LC 480	50
	Differentiation of Saccharomyces		
	spp., Dekkera spp., Pichia anomala		
	for LC 480		
	(LC640, 610, 705)		
Real-time PCR-Kit for detection of wild	Multiplex TaqMan-PCR for	TPWY 0096	96
yeast	detection of wild yeast	TPWY 0096 LC480	

Yeast, qualitative (FAM) with Inhibition-Control (HEX/ROX)

Product	Description	Art. No.	Rxn.
Candida spp.	FRET-Detection	HPYC 0050	50
Dekkera spp.	FRET-Detection (LC640, 705)	HPYD 0050	50
Dekkera anomala	TaqMan [™] -Detection	TPYDA 0050	50
Dekkera bruxellensis	TaqMan™-Detection, quantitative	TPYDB 0050	50
Pichia anomala	TaqMan [™] -Detection	TPYPA 0050	50
Pichia membranaefaciens	TaqMan [™] -Detection	TPYPM 0050	50
Saccharomyces diastaticus	TaqMan [™] -Detection	TPYSD 0050	50
Saccharomyces exiguus	FRET-Detection (LC640, 705)	HPYSX 0050	50
Saccharomyces pastorianus/bayanus	FRET- Detection with Differentiation (LC640, 705)	HPYPB 0050	50
Top-fermented yeast	TaqMan [™] -Detection	TPYOG 0050	50
Bottom-fermented yeast	TaqMan [™] -Detection	TPYUG 0050	50
Saccharomyces diastaticus / Top-fermented yeast	TaqMan [™] - Differentiation (FAM, ROX/HEX)	TSDOG 0050	50
Saccharomyces diastaticus / Bottom-fermented yeast	TaqMan™-Differentiation (FAM, ROX/HEX)	TSDUG 0050	50

PCR-detection Kits

Animal species

All PCR Kits are available for different real-time PCR machines on request

Real-time PCR, qualitative with internal Control (FAM/HEX)

Product	Description	Art. No.	Rxn.
First-Animal Tetra I	Tetraplex pork and beef and chicken and turkey FAM/HEX/ROX/Cy5	ANIT I 0050	50
First-Cattle	Cattle	PHCA 0050	50
First-Chicken	Chicken	PHC 0050	50
First-Donkey	Donkey	PHDO 0050	50
First-Duck	Duck	PHD 0050	50
First-Goat	Goat	PHG 0050	50
First-Horse	Horse	PHH 0050	50
First-Meat	mammalia and poultry	PHM 0050	50
First-Meat Extended	mammalia and poultry, human, plant FAM/HEX/Cy5	PHME 0050	50
First-Pig	Pig	PHP 0050	50
First-Ruminant	Ruminant animals according to EU	PHRU 0050	50
First-Sheep	Sheep	PHSP 0050	50
First-Turkey	Turkey	PHT 0050	50
First-duplex Donkey/Horse	Duplex donkey and horse	PHDOH 0050	50
First-duplex Cattle/Pig	Duplex beef and pork	PHCAP 0050	50
First-duplex Turkey/Chicken	Duplex chicken and turkey	PHTC 0050	50

Quantification is possible by combination of First-Meat as reference system with any other single specific animal-detection kit (except ruminant kit and multiplex kits)

Allergens/ Plant species

Real-time PCR, qualitative with internal Control All PCR-Kits are available for different real-time PCR machines on request

Product	Description	Art. No.	Rxn.
First-Almond	Almond	PALM 0050	50
First-Brazil nut	Brasil nut	PBRAS 0050	50
First-Cashew	Cashew	PCAS 0050	50
First-Celery	Celery	PCEL 0050	50
First-Hazelnut	Hazelnut	PHAZ 0050	50
First-Lupine	Lupine	PLUP 0050	50
First-Duplex Mustard	Mustard white, brown/ black (FAM/HEX/CY5)	PMUS 0050	50
First-Peanut	Peanut	PPEA 0050	50
First-Soya	Soybean	PSOY 0050	50
First-Sesame	Sesame	PSES 0050	50
First-Allergen Triplex Nut I	FAM-peanut, HEX-almond, Cy5- cashew	PPAC 0050	50
First-Allergen Triplex Nut II	FAM-peanut, HEX-almond, Cy5- hazelnut	PPAH 0050	50
First-Allergen Tetra I mustard, celery, sesame	Tetraplex-PCR FAM-white, HEX- black/ brown mustard, ROX- celery, Cy5-sesame	ALIT I 0050	50
First-Allergen Tetra II Iupine, almond, brasil nut, sesame	Tetraplex-PCR lupine, almond, brasil nut, sesame FAM/HEX/ROX/Cy5	ALIT I I 0050	50

Product	Description	Art. No.	Rxn.
First-Canola	Canola	PCAN 0050	50
First-Corn	Corn	PCOR 0050	50
First-Cotton	Cotton	PCOT 0050	50
First-Flax	Flax	PFLAX 0050	50
First-Potato	Potato	PPOT 0050	50
First-Rice	Rice	PRIC 0050	50
First-Wheat	Wheat	PWHE 0050	50
First-Wheat Quant	Quantification of soft wheat (Triticum aestivum) in hard wheat (T. durum)	QPWHE 0050	50
First-Plant & internal control	Plant in general, single copy (FAM), incl. internal Inhibition-Control (HEX)	PPLANT 0050	50
First-Plant & internal control	Plant in general, single copy (FAM), incl. internal Inhibition-Control (HEX	PPLANT 0100	100

Equipment

Acrylic-Pipette-Rack



Ergonomic pipette rack for 4 pipettes.

Suitable for commercial pipettes from $10 - 1000 \ \mu$ L.

Art. No.: PIP4