

# **PCR Kits**

## **Product List**

15 - V1



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## Terms and Conditions

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Cat #	Item	Description
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## DNA Extraction and Electrophoresis

Different DNA extraction kits are available: The *DNAExtractor* is buffer-based and especially recommended for rather inhomogenous samples. The *DNAExtractor Clean* kit includes an additional sephacryl column cleaning step, it is recommended for soy products and grains in general. Furthermore, there is the *DNAExtractor Fat* kit for DNA extraction from emulsifiers (lecithin), oils and fats. The *GENESpin* kit is very convenient to use for all kinds of food, feed samples. Generally for real-time PCR applications, the DNA purification step (DNA Cleaning Columns, included in “*Clean*” kits) is recommended.

5224400605	<i>GENESpin</i>	DNA extraction kit for 50 food or feed samples
5224400610	10 x 5224400605 <i>GENESpin</i>	10 DNA extraction kits for 50 food or feed samples each
5224400630	30 x 5224400605 <i>GENESpin</i>	30 DNA extraction kits for 50 food or feed samples each
5224400621	<i>GENESpin Clean 100</i> (2 x <i>GENESpin</i> and 100 DNA cleaning columns)	DNA extraction and purification kit for 100 food or feed samples
5224400620 <b>NEW!!!</b>	10 x <i>GENESpin Clean 100</i> (20 x <i>GENESpin</i> and 10 x 100 DNA cleaning columns)	DNA extraction and purification kit for 100 food or feed samples
5224701901	Additional lysis buffer for <i>GENESpin</i>	1000 mL
5224700610	<i>DNAExtractor</i>	DNA extraction kit for 50 seed, grain, food or feed samples (solvents not incl.)
5224700205	Additional lysis buffer for <i>DNAExtractor</i>	500 mL
5224700821	<i>DNAExtractor Clean 100</i> (2 x <i>DNAExtractor</i> and 100 DNA cleaning columns)	DNA extraction and purification kit for 100 samples, solvents not incl.
5224700310	DNA Cleaning Columns	100 DNA cleaning columns
5224700710	<i>DNAExtractor Fat</i> for lecithin, oil and fat	DNA extraction kit for 50 oil, fat or lecithin samples, solvents not incl.
5224700711	<i>DNAExtractor Fat Clean</i> for lecithin, oil and fat	DNA extraction kit for 50 samples with 100 DNA Cleaning Columns, solvents not incl.
5224700110	Special lysis buffer for lecithin, oil and fat for use with <i>DNAExtractor Fat</i>	2 x 50 mL
5224700910	<i>DNAExtractor Honey</i> (Qiagen/Retsch Tissue Lyser® needed)	DNA extraction kit for 50 honey/pollen samples
5224700911	<i>DNAExtractor Honey Clean 100</i> (Qiagen/Retsch Tissue Lyser® needed)	DNA extraction and purification kit for 100 honey/pollen samples, includes 100 DNA Cleaning Columns
5217720401	DNA Length Standard pUC18 HAIII size marker 26 – 501 bp	500 µL, 0.05 µg/µL
5216700201	RNase	5 mg/mL, 0.5 mL
5216700101	Proteinase K	20 mg/mL, 750 µL

## Qualitative real-time PCR GMOs and plant species

Cat #	Item	Description
<b>GMO Screen Kits for real-time PCR</b>		
<p>Our most convenient and economic approach to GMO screening: Duplex or Multiplex PCR for comprehensive GMO screenings. The kits contain all reagents and controls needed. Please check the required filter sets for your RT-PCR machine. Excel® evaluation sheets are available on request.</p>		
5421220301	<b>GMO Screen RT IPC (LR) 35S/NOS/FMV, for ABI 7500 (Fast)</b>	96 RT-PCR reactions, up to 44 samples per plate. Validated for use on ABI 7500 (Fast). Screening of pFMV, p35s and tNOS in a single tube with internal positive control (IPC).
5421220311	<b>10 x GMO Screen RT IPC (LR) 35S/NOS/FMV</b>	10 x 5421220301 for ABI 7500 Fast
5421220302	<b>GMO Screen RT IPC (NR) 35S/NOS/FMV for LC480 and MX3005P</b>	96 RT-PCR reactions, up to 44 samples per plate. Validated for use on Agilent (Stratagene) MX3005P and Roche LC480 (for LC480 color compensation required, see below). Screening of pFMV, p35s and tNOS in a single tube, with internal positive control (IPC).
5421220312	<b>10 x GMO Screen RT IPC (NR) 35S/NOS/FMV</b>	10 x 54212203 for LC480 and MX3005P02
5421220001	<b>GMO Screen RT IPC (LR) 35S/NOS</b>	96 RT-PCR reactions, up to 44 samples per plate. Validated for use on ABI 7500/7500 Fast, Agilent MX3005P/MX3000P, Roche LC480 (color compensation required, see below). Duplex screening with internal positive control (IPC).
5421220002	<b>GMO Screen RT 35S/IPC and NOS/IPC (LR/HR+)</b>	2 x 96 RT-PCR reactions, for up to 40 samples. For use on low-ROX and high-ROX cyclers with FAM and VIC filters.
5421220303	<b>GMO Screen RT 35S/IPC and NOS/IPC and FMV/IPC (LR/HR+)</b>	3 x 96 RT-PCR reactions, for up to 40 samples. For use on low-ROX and high-ROX cyclers with FAM and VIC filters.
5421210028	<b>GMO Screen LC 35S/NOS</b>	2 x 128 RT-PCR reactions for p35s and tNOS detection on LightCycler™ 1.x + 2.x (Roche)
5421225001	<b>GMO Screen RT IPC (LR) bar/pat</b>	96 RT-PCR reactions, for up to 44 samples. Duplex-screening with internal positive control (IPC) for inhibition control.
5421225601	<b>GMO Screen RT IPC (LR) CV127/SAMS-ALS</b>	96 RT-PCR reactions, for up to 44 samples. Duplex-detection of CV127 soy and SAMS-als modification (e.g. DP356043/ DP305423 soy) with IPC for inhibition control.
5421225401	<b>GMO Screen RT IPC (LR) Event GA21/PMI-NOS</b>	96 RT-PCR reactions, for up to 44 samples. Duplex-screening for GA21 corn and pmi/nos modification (e.g. MIR604, MIR162, 3272, 5307 corn) with IPC for inhibition control. Only for use on MX3005P/MX3000P!
5421225201	<b>GMO Screen RT (UMM) Cry1Ab/Ac</b>	96 RT-PCR reactions, up to 44 samples per plate.
5427200101	<b>GMO Screen RT – Color Compensation on LC480</b>	Kit needed for Color Compensation Analysis prior to first use of GMO Screen RT kits on LC480
5421299901	<b>Verification Kit for GMO Screen RT (35S/NOS/FMV)</b>	Verification kit for GMO Screen RT kits (35S/NOS and 35S/NOS/FMV (IPC)); LOD verification, DNAs, instruction and evaluation table included. One GMO Screen RT kit needed additionally.

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## GMOIdent RT Kits LR + HR (qualitative real-time PCR)

The **GMOIdent RT** product line enables you to identify and/or exclude single **GMO** varieties in your sample with real-time PCR on many RT cyclers. Many kits contain an internal positive control (IPC). Most kits employ the **GMO PCR** systems from the official **European EURL** methods. The kits are validated for use on **ABI 7900, 7500 Fast, and Agilent MX3005P** and can beyond this be used on most RT-PCR instruments (LR and HR), if not mentioned otherwise.

### Corn

5421223101	<b>GMOIdent RT Bt176 Corn</b>	Kit with 96 real-time PCR rxns for modification-specific detection of <b>Bt176 corn</b>
5421223201	<b>GMOIdent RT Event Bt11 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>Bt11 corn</b>
5421224801	<b>GMOIdent RT Event MIR162 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MIR162 corn</b>
5421223301	<b>GMOIdent RT (IPC) Event T25 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>T25 corn</b> with internal pos. control
5421221001	<b>GMOIdent RT (IPC) Event NK603 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>NK603 corn</b> with internal pos.control
5421221101	<b>GMOIdent RT (IPC) Event MIR604 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MIR604 corn</b> with intern. pos. control
5421221201	<b>GMOIdent RT (IPC) Event DAS-59122-7 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>Herculex™ RW DAS-59122-7 corn</b> with internal positive control
5421222401	<b>GMOIdent RT (IPC) Event TC1507 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>Herculex™ I TC1507 corn</b> with internal positive control
5421221501	<b>GMOIdent RT (IPC) Event MON810 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MON810 corn</b> with intern. pos. contr.
5421221601	<b>GMOIdent RT (IPC) Event MON89034 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MON89034 corn</b> with internal positive control
5421221701	<b>GMOIdent RT (IPC) Event MON863 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MON863 corn</b> with internal positive control
5421221801	<b>GMOIdent RT (IPC) Event MON88017 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MON88017 corn</b> with internal positive control
5421222501	<b>GMOIdent RT (IPC) Event GA21 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>GA21 corn</b> with internal pos. control
5421224901	<b>GMOIdent RT (IPC) Event 3272 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>3272 corn</b> with internal pos. control
5421225501	<b>GMOIdent RT (IPC) Ly038 Corn</b>	Kit with 96 real-time PCR rxns for modification-specific detection of <b>Ly038 corn</b> with internal positive control
5421225801	<b>GMOIdent RT (IPC) Event MON87460 Corn</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MON87460-4 corn</b> with internal positive control

Cat #	Item	Description
<b>GMOIdent RT Kits LR + HR (qualitative real-time PCR)</b>		
<b>Cotton</b>		
5421222901	<b>GMOIdent RT Event MON1445 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific det. of <b>RoundupReady™ (MON1445) cotton</b>
5421223401	<b>GMOIdent RT Event MON88913 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>RR Flex (MON88913) cotton</b>
5421223901	<b>GMOIdent RT Event MON531 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific det. of <b>Bollgard™ (MON531/MON15985) cotton</b>
5421224001	<b>GMOIdent RT Event MON15985 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific det. of <b>Bollgard™ (MON531/MON15985) cotton</b>
5421224101	<b>GMOIdent RT Event LLcotton25 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>LLotton25™ cotton</b>
5421224501	<b>GMOIdent RT Event 281-24-236 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>281-24-236 cotton</b>
5421224601	<b>GMOIdent RT Event 3006-210-23 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>3006-210-23 cotton</b>
5421224701	<b>GMOIdent RT Event GHB614 Cotton</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>GHB614 cotton</b>
<b>Flax</b>		
5421222601	<b>GMOIdent RT (IPC) FP967 Flax</b>	Kit with 96 real-time PCR rxns for modification-specific detection of <b>CDC Triffid™ flax/linseed</b> with internal pos. control
<b>Potato</b>		
5421223601	<b>GMOIdent RT Event EH92-527-1 Potato</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>Amflora™ EH92-527-1 potato</b>
<b>Rapeseed</b>		
5421223501	<b>GMOIdent RT (IPC) Event T45 Canola</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>LibertyLink™T45 rapeseed</b> with IPC
5421224201	<b>GMOIdent RT Event MS8 Rapeseed</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>MS8 rapeseed</b>
5421224301	<b>GMOIdent RT Event Rf3 Rapeseed</b>	Kit for event-specific detection of <b>Rf3 rapeseed</b>
5421224401	<b>GMOIdent RT Event RT73 Rapeseed</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>RoundupReady™ RT73 rapeseed</b>
<b>Rice</b>		
5421222001	<b>GMOIdent RT Event LL62 Rice</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>LL62 rice</b>
5421222101	<b>GMOIdent RT Event LL601 Rice</b>	Kit with 96 real-time PCR rxns for event-specific detection of <b>LL601 rice</b>
5221103801	<b>GMOIdent RT LibertyLink™ Rice</b>	Kit with 96 real-time PCR rxns for detection (96 rxns) of <b>LibertyLink™ varieties (p35s/bar)</b> in rice
5221103809	<b>GMOIdent RT LibertyLink™ Rice (with species control)</b>	Kit 5221103801 plus rice species control (96 rxns each for GMO and rice species)
5421221401	<b>GMOIdent RT Bt Rice</b>	Kit with 96 real-time PCR rxns for detection of <b>Bt63 rice</b> in rice samples (method by Mäde et al.)
5421221409	<b>GMOIdent RT Bt Rice (with species control)</b>	5421221401 plus rice species control (96 rxns each for GMO and rice species)

Cat #	Item	Description
<b>GMOIdent RT Kits (qualitative real-time PCR, LR + HR)</b>		
<b>Soy</b>		
5421221301	<b>GMOIdent RT (IPC) Event A2704-12 Soy</b>	Kit with 96 RT-PCR rxns for event-specific det. of <b>LibertyLink™ A2704-12 soy</b> with IPC.
5421221901	<b>GMOIdent RT (IPC) Event MON89788 Soy</b>	Kit with 96 RT-PCR rxns for event-specific det. of <b>MON89788 soy</b> with intern. pos. contr.
5421222301	<b>GMOIdent RT (IPC) RoundupReady™ Soy</b>	Kit with 96 RT-PCR rxns for modification-specific detection of <b>MON4032-6 soy</b> with IPC
5421222701	<b>GMOIdent RT (IPC) Event DP-305423-1 Soy</b>	Kit with 96 RT-PCR rxns for event-specific detection of <b>DP-305423-1 soy</b> with int. pos. contr.
5421225101	<b>GMOIdent RT (IPC) CV127 Soy</b>	Kit with 96 RT-PCR rxns for event-specific detection of <b>CV127 soy</b> with internal pos. control
5421223701	<b>GMOIdent RT Event A5547-127 Soy</b>	Kit with 96 RT-PCR rxns for event-specific detection of <b>LibertyLink™ A5547-127 soy</b>
5421225301	<b>GMOIdent RT Event MON87701 Soy</b>	Kit with 96 RT-PCR rxns for event-specific detection of <b>MON87701 soy</b>
5421225701	<b>GMOIdent RT Event MON87705 Soy</b>	Kit with 96 RT-PCR rxns for event-specific detection of <b>MON87705 soy</b>
5421225901	<b>GMOIdent RT Event FG72 Soy</b>	Kit with 96 RT-PCR rxns for event-specific detection of <b>FG72 soy</b>
<b>Sugarbeet</b>		
5421222801	<b>GMOIdent RT (IPC) Event H7-1 Sugarbeet</b>	Kit with 96 RT-PCR rxns for event-specific detection of <b>H7-1 sugarbeet</b> with int. pos. control

Cat #	Item	Description
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### SpeciesScreen RT Kits (qual. real-time PCR, LR + HR)

5421229401	SpeciesScreen Plant RT IPC	Kit with 96 RT-PCR rxns for general plant DNA detection with internal positive control. All reagents and controls included.
5421229410 <b>NEW!!!</b>	10 x 5421229401 SpeciesScreen Plant RT IPC	10 Kits with 96 RT-PCR rxns each for general plant DNA detection with internal positive control. All reagents and controls included.

### SpeciesIdent RT Kits (qualitative real-time PCR, LR + HR)

5421229001	SpeciesIdent RT Corn/Maize	Kit with 96 RT-PCR rxns for corn/maize species detection. All reagents and controls included.
5421229301	SpeciesIdent RT Soy IPC (LR/HR)	Kit with 96 RT-PCR rxns for soy species detection with internal positive control (IPC). All reagents and controls included.
5421229501	SpeciesIdent RT Cotton IPC Species	Kit with 96 RT-PCR rxns for cotton species detection with internal positive control (IPC). All reagents and controls included.
5421229601	SpeciesIdent RT Rice IPC Species	Kit with 96 RT-PCR rxns for rice species detection with internal positive control (IPC). All reagents and controls included.
5421229701 <b>NEW!!!</b>	SpeciesIdent RT CaMV IPC	Kit with 96 RT-PCR rxns for Cauliflower Mosaic Virus species detection with internal positive control (IPC). All reagents and controls included.
5421229801 <b>NEW!!!</b>	SpeciesIdent RT Agrobacterium tumefaciens IPC	Kit with 96 RT-PCR rxns for <i>Agrobacterium tumefaciens</i> species detection with internal positive control (IPC). All reagents and controls included.



## Conventional PCR: GMO and plant species

Cat #	Item	Description
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### SpeciesIdent Kits for gel-based PCR

With the *SpeciesIdent* product line, plant species as potential GMO sources and natural occurrence of the virus CaMV (source of the 35s promoter) can be detected/excluded. The kits contain all reagents and controls for conventional PCR.

5222104010	<b>SpeciesIdent Cotton</b>	Kit for cotton species DNA detection. Premaster and control DNA for 100 rxns
5222104110	<b>SpeciesIdent Soy</b>	Kit for soy species DNA detection. Premaster and control DNA for 100 rxns
5222104210	<b>SpeciesIdent Corn/Maize</b>	Kit for corn/maize species DNA detection. Premaster and control DNA for 100 rxns
5222103620	<b>SpeciesIdent CaMV</b>	Kit for Cauliflower Mosaic Virus reverse transcriptase gene detection. Premaster and control DNA for 100 rxns
5222104310	<b>SpeciesIdent Agrobacterium tumefaciens</b>	Kit for <i>Agrobacterium tumefaciens</i> nos gene detection. Premaster and control DNA for 100 rxns

### GMOScreen Kits for gel-based PCR

The *GMOScreen* product line is designed for a basic approach to GMO testing: it offers several combinations of screening elements. All kits contain all reagents and controls needed.

5221105610	<b>GMOScreen 35S/NOS/FMV</b>	Kit for a general screening for GMO in food/feed: detection of the CaMV 35s promoter, the <i>A. tumefaciens</i> nos terminator, the FMV 34s promoter and plant chloroplast DNA as control. Premasters for 100 rxns each, control DNA and gel length marker incl.
5221105010	<b>GMOScreen 35S/NOS</b>	Kit for a general screening for GMO in DNA from food/feed: detection of CaMV 35s promoter and nos terminator and plant chloroplast DNA. Premaster and control DNA for 100 rxns each, gel length marker incl.
5221105005	<b>GMOScreen S 35S/NOS</b>	like 5221105010, but with 50 rxns each
5221104420	<b>GMOScreen Rapeseed</b>	Kit for a comprehensive GMO screening in rapeseed samples: detection of nos terminator, pat(syn) gene, Laurical™ and Roundup Ready™ rapeseed with <i>Brassica</i> control reaction. Premasters for 50 rxns each, control DNAs and gel length marker included.

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## GMOIdent Kits (gel-based PCR kits)

The **GMOIdent** product line enables you to identify and/or exclude single GMOs in your sample. The **GMOIdent** kits are designed for conventional PCR and contain control DNA and premasters for GMO and species testing, and a length standard for gel electrophoresis.

5221102309	<b>GMOIdent RoundupReady™ Soy</b>	Kit for modification-specific detection of Roundup Ready™ soy and soy DNA (Ie1) control, 100 rxns each
5221102909	<b>GMOIdent Combi Corn</b>	Kit for detection of Bt11/Bt10, Bt176, MON810 and LibertyLink™ / T25 corn, with corn (hmgA) control PCR, 100 rxns each
5221104309	<b>GMOIdent Corn Comprehensive</b>	Kit for detection of Bt11/Bt10, event Bt11, Bt176, MON810, LL, T25, MON863, GA21, NK603, TC1507 and DAS-59122-7 corn, <b>50 reactions each</b> and 100 rxns corn (hmgA) control PCR
5221105709	<b>GMOIdent GM Corn</b>	Kit for detection of Bt11, Bt176, MON810, LL, T25, MON863, GA21, NK603, TC1507, DAS-59122-7, MON88017/MON89034, MIR162/MIR604/3272, <b>50 rxns each</b> and 100 rxns corn (hmgA) control PCR
5221102409	<b>GMOIdent Maximizer™ Bt176 Corn</b>	Kit for modification-specific detection of Bt176 corn with corn DNA (hmgA) control PCR, 100 rxns each
5221102509	<b>GMOIdent Bt11/Bt10 Corn</b>	Kit for modification-specific detection of Bt11 and Bt10 corn with corn (hmgA) control PCR, 100 rxns each
5221104109	<b>GMOIdent Event Bt11 Corn</b>	Kit for event-specific detection of Bt11 corn with corn DNA (hmgA) control PCR, 100 rxns each
5221102609	<b>GMOIdent LibertyLink™ and T25 Corn</b>	Kit for detection of Liberty-Link™ corn and specific det. of T25 corn with corn control PCR, 100 rxns each
5221102709	<b>GMOIdent Event MON810 Corn</b>	Kit for event-specific detection of MON810 corn with corn DNA (hmgA) control PCR, 100 rxns each
5221104709	<b>GMOIdent MON88017/MON89034 Corn</b>	Kit for modi.-specific detection of MON88017 and MON89034 corn with corn contr. PCR, 100 rxns each
5221104809	<b>GMOIdent Event NK603 Corn</b>	Kit for event-specific detection of NK603 corn with corn control PCR, 100 rxns each
5221104909	<b>GMOIdent Event MON863</b>	Kit for event-specific detection of MON863 corn with corn control, 100 rxns each
5221103009	<b>GMOIdent RoundupReady™ GA21 Corn</b>	Kit for modification-specific detection of GA21 corn with corn DNA (hmgA) control PCR, 100 rxns each
5221103209	<b>GMOIdent Event TC1507 Corn</b>	Kit for event-specific detection of Herculex™ I TC 1507 corn with corn (hmgA) control PCR, 100 rxns each
5221104209	<b>GMOIdent Event DAS-59122-7 Corn</b>	Kit for event-specific detection of Herculex™ Rootworm DAS-59122-7 corn with control (hmgA) control PCR, 100 rxns each
5221102809	<b>GMOIdent StarLink™ Corn</b>	Kit for specific detection of StarLink™ CBH351 corn with corn DNA (hmgA) control PCR, 100 rxns each
5221103309	<b>GMOIdent Sunup™ Papaya</b>	Kit for mod.-specific detection of Sunup™/Rain-bow™ papaya with papaya control PCR, 100 rxns each
5221103701	<b>GMOIdent Mini-Kit Bt63 Rice</b>	Kit for mod.-specific detection of Bt63 rice (100 rxns cry1Ac/NOS) in rice samples ( <b>w/o species control!</b> )
5221105101	<b>GMOIdent Mini-Kit FP967 Flax</b>	Kit for mod.-specific detection of CDC Triffid™ flax (100 rxns) ( <b>w/o species control!</b> )
5221105201	<b>GMOIdent Mini-Kit SeedLink™ Canola</b>	Kit for mod.-specific detection of SeedLink™ rapeseed (100 rxns) ( <b>w/o species control!</b> )

## Quantitative real-time GMO PCR

Cat #	Item	Description
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### GMOQuant Kits

The **GMOQuant** product line is designed for quantitation of GMOs in your sample. There are specific kits and kits for screening quantitation (35S promoter) available. The kits are validated on ABI and Agilent instruments, but can be used on any realtime PCR cyclers equipped with detection devices for the dyes contained in the kits.

All kits contain FAM (reporter dye), ROX (normalizer) (except Light Cycler™ kits) and a quencher. The kits contain ready-to-use mastermixes for species and GMO for 100 reactions each, calibration DNA standards and a quantification control DNA..

With the setup recommended, the kits serve for a maximum of 18 samples. For LightCycler™ carousel cyclers (Roche), there are special kits available for a maximum of 16 samples (see below).

### GMOQuant for LightCycler™ 1.x/2.x (for LC480 use LR!)

5121200828	<b>GMOQuant (LC) 35S Screen Corn</b>	Kit for a GMO screening quantitation with CaMV 35S promoter and corn DNA (hmgA) reference PCR; 2 x 128 reactions
5121202028	<b>GMOQuant (LC) Bt11/Bt10 Corn</b>	Kit for quantitation of Bt11/Bt10 corn with corn DNA (hmgA) reference PCR; 2 x 128 reactions
5121205428	<b>GMOQuant (LC) LibertyLink™ Corn</b>	Kit for quantitation of LibertyLink™ corn with corn DNA (hmgA) reference PCR; 2 x 128 reactions
5121203228	<b>GMOQuant (LC) Maximizer™ Bt176 Corn</b>	Kit for specific quantitation of Bt176 corn with corn DNA (hmgA) reference PCR; 2 x 128 reactions
5121203328	<b>GMOQuant (LC) Event MON810 Corn</b>	Kit for event-specific quantitation of MON810 corn with corn DNA (hmgA) reference PCR; 2 x 128 rxns
5121200728	<b>GMOQuant (LC) RoundupReady™ Soy</b>	Kit for specific quantitation of RoundupReady™ soy with soy DNA (le1) reference PCR; 2 x 128 rxns

Kits with 2 x 64 reactions available on request. Please contact us: [kits@eurofins.de](mailto:kits@eurofins.de)

Cat #	Item	Description
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### GMOQuant Verification Kits (HR + LR + UMM)

Verification kits are available for all **GMOQuant** kits. To order the corresponding verification kit for a specific **GMOQuant** kit, please kindly quote the cat. no. of the **GMOQuant** kit and ask for the corresponding verification kit.

The kits come with detailed instructions and an evaluation table for the verification results.

5121299901	<b>Verification kit for GMOQuant Screen 35S/Soy and RoundupReady Soy</b>	Verification kit for <b>GMOQuant</b> RoundupReady Soy and <b>GMOQuant</b> Screen 35S/Soy kits (two corresponding <b>GMOQuant</b> kits needed additionally)
	<b>Verification kit for GMOQuant kit of choice</b>	Verification kit for <b>GMOQuant</b> kit of choice (two corresponding <b>GMOQuant</b> kits needed additionally)

Cat #	Item	Description
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## GMOQuant (LR) (Low ROX<sup>®</sup>, e.g. for ABI 7500 (Fast), Bio-Rad IQ5, Roche LC 480, Agilent MX3005P, MX3000P)

### Corn

5121203510	<b>GMOQuant (LR) 35S Screen Corn</b>	Kit for a GMO screening quantitation with CaMV 35S promoter and corn DNA (hmgA) reference PCR, 100 rxns each
5121204410	<b>GMOQuant (LR) Event NK603 Corn</b>	Kit for event-specific quantitation of NK603 corn with corn DNA (hmgA) reference PCR, 100 rxns each
5121204610	<b>GMOQuant (LR) Event GA21 Corn</b>	Kit for event-specific quantitation of GA21 corn with corn DNA (hmgA) reference PCR, 100 rxns each
5121206410	<b>GMOQuant (LR) Event MIR604 Corn</b>	Kit for event-specific quantitation of MIR604 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121206510	<b>GMOQuant (LR) Event Bt11 Corn</b>	Kit for event-specific quantification of Bt11 corn with corn (hmgA) reference PCR, 100 rxns each
5121207310	<b>GMOQuant (LR) Event MON88017 Corn</b>	Kit for event-specific quantitation of MON88017 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121206710	<b>GMOQuant (LR) Event MON89034 Corn</b>	Kit for event-specific quantitation of MON89034 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121207610	<b>GMOQuant (LR) Event 3272 Corn</b>	Kit for event-specific quantitation of 3272 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121207810	<b>GMOQuant (LR) Event MON810 Corn</b>	Kit for event-specific quantitation of MON810 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121208010	<b>GMOQuant (LR) Event MON863 Corn</b>	Kit for event-specific quantitation of MON863 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121209310	<b>GMOQuant (LR) Event TC1507 Corn</b>	Kit for event-specific quantitation of Herculex I <sup>™</sup> TC1507 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121208210	<b>GMOQuant (LR) Event DAS-59122-7 Corn</b>	Kit for event-specific quantitation of DAS-59122-7 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121209710	<b>GMOQuant (LR) Event MIR162 Corn</b>	Kit for event-specific quantitation of MIR162 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121209410	<b>GMOQuant (LR) Event Bt176 Corn</b>	Kit for event-specific quantitation of Bt176 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121209610	<b>GMOQuant (LR) CBH351 Corn</b>	Kit for modification-specific quantitation of StarLink <sup>™</sup> /CBH351 corn with corn DNA reference PCR, 100 rxns each

Cat #	Item	Description
<b>Cotton</b>		
5121220910	<b>GMOQuant (LR) 3006-210-23 Cotton</b>	Kit for event-specific quantitation of 3006-210-23 cotton with cotton DNA ref. PCR, 100 rxns each
5121221110	<b>GMOQuant (LR) 281-24-236 Cotton</b>	Kit for event-specific quantitation of 281-24-236 cotton with cotton DNA ref. PCR, 100 rxns each
<b>Rapeseed</b>		
5121208410	<b>GMOQuant (UMM) Event T45 Rapeseed</b>	Kit for event-specific quantitation of T45 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
5121208910	<b>GMOQuant (UMM) Event RT73 Rapeseed</b>	Kit for event-specific quantitation of RT73 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
5121209010	<b>GMOQuant (UMM) Event MS8 Rapeseed</b>	Kit for event-specific quantitation of MS8 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
5121209110	<b>GMOQuant (UMM) Event Rf3 Rapeseed</b>	Kit for event-specific quantitation of Rf3 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
<b>Rice</b>		
5121209210	<b>GMOQuant (UMM) Event LL62 Rice</b>	Kit for event-specific quantitation of LL62 rice with rice DNA ref. PCR, 100 rxns each
<b>Soy</b>		
5121210010	<b>GMOQuant Duplex (LR) 35S/MON89788 Soy</b>	Kit for a duplex GMO quantitation of CaMV 35S promoter and event MON89788 soy (100 rxns) with soy DNA (le1) reference PCR (100 rxns)
5121207210	<b>GMOQuant (LR) 35S Screen Soy</b>	Kit for a GMO screening quantitation with soy DNA (le1) ref. PCR, 100 rxns each
5121203410	<b>GMOQuant (LR) RoundupReady™ Soy</b>	Kit for modification-specific quantitation of GTS-40-3-2 soy with soy DNA (le1) ref. PCR, 100 rxns each
5121206810	<b>GMOQuant (LR) Event A2704-12 Soy</b>	Kit for event-specific quantitation of A2704-12 soy with soy DNA (le1) ref. PCR, 100 rxns each
5121207010	<b>GMOQuant (LR) Event MON89788 Soy</b>	Kit for event-specific quantitation of MON89788 soy with soy (le1) ref. PCR, 100 rxns each
5121207510	<b>GMOQuant (UMM) Event DP-305423-1 Soy</b>	Kit for event-specific quantitation of DP-305423-1 soy with soy (le1) ref. PCR, 100 rxns each
5121220210	<b>GMOQuant (UMM) Event DP-356043-5 Soy</b>	Kit for event-specific quantitation of DP-356043-5 soy with soy (le1) ref. PCR, 100 rxns each
5121220310	<b>GMOQuant (UMM) Event MON87701 Soy</b>	Kit for event-specific quantitation of MON87701 soy with soy (le1) ref. PCR, 100 rxns each
5121220610	<b>GMOQuant (UMM) Event A5547-127 Soy</b>	Kit for event-specific quantitation of A5547-127 soy with soy (le1) ref. PCR, 100 rxns each
5121220710	<b>GMOQuant (UMM) Event CV127 Soy</b>	Kit for event-specific quantitation of CV127 soy with soy (le1) ref. PCR, 100 rxns each
5121221610	<b>GMOQuant (LR) Event MON87705 Soy</b>	Kit for event-specific quantitation of MON87705 soy with soy (le1) ref. PCR, 100 rxns each

++++ Kits with 2 x 50 reactions are available on request. Please contact us: [kits@eurofins.de](mailto:kits@eurofins.de)

Cat #	Item	Description
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## GMOQuant (HR) (High ROX®, e.g. for ABI 7300, 7900)

### Corn

5121200610	<b>GMOQuant (HR) 35S Screen Corn</b>	Kit for a GMO screening quantitation with corn DNA (hmgA) ref. PCR, 100 rxns each
5121209810	<b>GMOQuant (HR) Event Bt176 Corn</b>	Kit for event-specific quantitation of Bt176 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121209910	<b>GMOQuant (HR) Event Bt11 Corn</b>	Kit for event-specific quantitation of Bt11 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121208110	<b>GMOQuant (HR) Event MON863 Corn</b>	Kit for event-specific quantitation of MON863 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121201510	<b>GMOQuant (HR) Event MON810 Corn</b>	Kit for event-specific quantitation of MON810 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121201610	<b>GMOQuant (HR) LibertyLink™ Corn</b>	Kit for quantitation of LibertyLink™ (T14/T25) corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121204310	<b>GMOQuant (HR) Event NK603 Corn</b>	Kit for event-specific quantitation of NK603 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121204510	<b>GMOQuant (HR) Event GA21 Corn</b>	Kit for event-specific quantitation of GA21 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121201810	<b>GMOQuant (HR) StarLink™ Corn</b>	Kit for specific quantitation of StarLink™ corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121202310	<b>GMOQuant (HR) Event TC1507 Corn</b>	Kit for event-specific quantitation of Herculex™ I TC1507 corn with corn DNA (hmgA) reference PCR, 100 rxns each
5121202910	<b>GMOQuant (HR) Event DAS-59122-7 Corn</b>	Kit for event-specific quantitation of Herculex™ RW DAS-59122-7 corn with corn (hmgA) reference PCR, 100 rxns each
5121205510	<b>GMOQuant (HR) Event MIR604 Corn</b>	Kit for event-specific quantitation of MIR604 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121207410	<b>GMOQuant (HR) Event MON88017 Corn</b>	Kit for event-specific quantitation of MON88017 corn with corn DNA (hmgA) ref. PCR, 100 rxns each
5121206910	<b>GMOQuant (HR) Event MON89034 Corn</b>	Kit for event-specific quantitation of MON89034 corn with corn DNA (hmgA) ref. PCR, 100 rxns each

### Cotton

5121221010	<b>GMOQuant (HR) 3006-210-23 Cotton</b>	Kit for event-specific quantitation of 3006-210-23 cotton with cotton DNA ref. PCR, 100 rxns each
5121221210	<b>GMOQuant (HR) 281-24-236 Cotton</b>	Kit for event-specific quantitation of 281-24-236 cotton with cotton DNA ref. PCR, 100 rxns each

### Potato

5121207910	<b>GMOQuant (HR) Event EH92-527-1 Potato</b>	Kit for event-specific quantitation of EH92-527-1 (Amflora™) potato with UDP-glycose pyrophosphorylase species ref. PCR, 100 rxns each
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**Method verification made easy: Find our new GMOQuant Verification kits on p. 11!**



Cat #	Item	Description
<b>GMOQuant (HR) (High ROX®, e.g. for ABI 7300, 7900)</b>		
<b>Rapeseed</b>		
5121208410	<b>GMOQuant (UMM) Event T45 Rapeseed</b>	Kit for event-specific quantitation of T45 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
5121208910	<b>GMOQuant (UMM) Event RT73 Rapeseed</b>	Kit for event-specific quantitation of RT73 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
5121209010	<b>GMOQuant (UMM) Event MS8 Rapeseed</b>	Kit for event-specific quantitation of MS8 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
5121209110	<b>GMOQuant (UMM) Event Rf3 Rapeseed</b>	Kit for event-specific quantitation of Rf3 rapeseed with rapeseed DNA ref. PCR, 100 rxns each
<b>Rice</b>		
5121209210	<b>GMOQuant (UMM) Event LL62 Rice</b>	Kit for event-specific quantitation of LL62 rice with rice DNA (sps) ref. PCR, 100 rxns each
<b>Soy</b>		
5121203110	<b>GMOQuant (HR) 35S Screen Soy</b>	Kit for a GMO CaMV p35S screening quantitation with soy DNA (le1) ref. PCR, 100 rxns each
5121200410	<b>GMOQuant (HR) RoundupReady™ Soy</b>	Kit for modification-specific quantitation of GTS-40-3-2 soy with soy DNA (le1) ref. PCR, 100 rxns each
5121206310	<b>GMOQuant (HR) Event A2704-12 Soy</b>	Kit for event-specific quantitation of A2704-12 soy with soy DNA (le1) ref. PCR, 100 rxns each
5121207110	<b>GMOQuant (HR) Event MON89788 Soy</b>	Kit for event-specific quantitation of MON89788 soy with soy DNA (le1) ref. PCR, 100 rxns each
5121207510	<b>GMOQuant (UMM) Event DP-305423-1 Soy</b>	Kit for event-specific quantitation of DP-305423-1 soy with soy (le1) ref. PCR, 100 rxns each
5121220310	<b>GMOQuant (UMM) Event MON87701 Soy</b>	Kit for event-specific quantitation of MON87701 soy with soy (le1) ref. PCR, 100 rxns each
5121220610	<b>GMOQuant (UMM) Event A5547-127 Soy</b>	Kit for event-specific quantitation of A5547-127 soy with soy (le1) ref. PCR, 100 rxns each
5121220710	<b>GMOQuant (UMM) Event CV127 Soy</b>	Kit for event-specific quantitation of CV127 soy with soy (le1) ref. PCR, 100 rxns each
5121221710	<b>GMOQuant (HR) Event MON87705 Soy</b>	Kit for event-specific quantitation of MON87705 soy with soy (le1) ref. PCR, 100 rxns each
<b>Sugarbeet</b>		
5121206210	<b>GMOQuant (HR) Event H7-1 Sugarbeet</b>	Kit for event-specific quantitation of H7-1 sugarbeet with glutamine synthetase sugarbeet ref. PCR, 100 rxns each

++++ Kits with 2 x 50 reactions are available on request. Please contact us: [kits@eurofins.de](mailto:kits@eurofins.de)

## Control DNA GMOs and Plant Species

Cat #	Item	Packaging
<b>Control DNA GMOs</b>		
<b>Control DNA i.e. for use with GMO<i>dent</i> kit, if not mentioned otherwise made from 100% (w/w) GMO material. Sorted by species.</b>		
5211508101	Genomic DNA 3272 corn, 10% GMO, made from CRM BF420c (SYN-E3272-5)	(100 copies GMO/μL) 0.15 mL
5211501001	Genomic DNA Bt11 corn (SYN-BT011-1)	(100 copies/μL) 0.15 mL
5211500701	Genomic DNA Bt176 corn (SYN-EV176-9)	(100 copies/μL) 0.15 mL
5211501301	Genomic DNA CBH351 corn (ACS-ZM004-3)	(100 copies/μL) 0.15 mL
5211501201	Genomic DNA GA21 corn (MON-00021-9)	(100 copies/μL) 0.15 mL
5211507101	Genomic DNA Herculex™ I TC 1507 corn, 10% GMO, from ERM BF418d (DAS-01507-1)	(100 copies GMO/μL) 0.15 mL
5211507201	Genomic DNA Herculex™ RW DAS-591227 corn, 10% GMO, made from ERM BF424b (DAS-59122-7)	(100 copies GMO/μL) 0.15 mL
5211516301	Genomic DNA MIR162 corn (SYN-IR162-4)	(100 copies/μL) 0.15 mL
5211506401	Genomic DNA MIR604 corn DNA, 10% GMO (from ERM BF-423d) (SYN-IR604-5)	(100 copies GMO/μL) 0.15 mL
5211500901	Genomic DNA MON810 corn (MON-00810-6)	(100 copies/μL) 0.15 mL
5211502301	Genomic DNA MON863 corn (MON-00863-5)	(100 copies/μL) 0.15 mL
5211516401	Genomic DNA MON87460 corn (MON-87460-4)	(100 copies/μL) 0.15 mL
5211512001	Genomic DNA MON88017 corn (MON-88017-3)	(100 copies/μL) 0.15 mL
5211512101	Genomic DNA MON89034 corn (MON-89034-3)	(100 copies/μL) 0.15 mL
5211508201	Genomic DNA NK603 corn (MON-00603-6)	(100 copies/μL) 0.15 mL
5211500801	Genomic DNA T25 corn (ACS-ZM003-2)	(100 copies/μL) 0.15 mL
5211512401	Genomic DNA LLCotton25 (ACS-GH001-3)	(100 copies/μL) 0.15 mL
5211511301	Genomic DNA MON1445 cotton (MON-01445-2)	(100 copies/μL) 0.15 mL
5211512201	Genomic DNA MON15985 cotton (MON-15985-7)	(100 copies/μL) 0.15 mL
5211512301	Genomic DNA MON531 cotton (MON-00531-6)	(100 copies/μL) 0.15 mL
5211511401	Genomic DNA MON88913-8 cotton (MON-88913-8)	(100 copies/μL) 0.15 mL
5211512701	Genomic DNA 281-24-236 x 3006-210-23 (Widestrike) cotton	(100 copies/μL) 0.15 mL
5211509901	Plasmid DNA pGSE625 (FP967 flax; EURL method) (CDC-FL001-2)	(100 copies/μL) 0.15 mL
5211515401	Plasmid DNA pGSE644 (Sunup™ papaya) (e.g. for LMBG §64 PCR and RT-PCR methods)	(100 copies/μL) 0.15 mL
5211514801	Genomic DNA Sunup papaya (event 55-1)	(100 copies/μL) 0.15 mL



Cat #	Item	Packaging
<b>Control DNA GMOs (continued)</b>		
5211507901	Genomic DNA MS8 rapeseed (ACS-BNØØ5-8)	(100 copies/µL) 0.15 mL
5211512601	Genomic DNA Rf3 rapeseed (ACS-BNØØ3-6)	(100 copies/µL) 0.15 mL
5211501701	Genomic DNA RT73 rapeseed (MON-ØØØ73-7)	(100 copies/µL) 0.15 mL
5211512501	Genomic DNA T45 rapeseed (ACS-BNØØ8-2)	(100 copies/µL) 0.15 mL
5211505001	Plasmid DNA pGSE28 (Bt63 rice, EURL recommended method)	(100 copies/µL) 0.15 mL
5211508501	Plasmid DNA pGSE219 (LL62 rice, ACS-OSØØ2-5), for use with EURL detection method	(100 copies/µL) 0.15 mL
5211505401	Plasmid DNA pGSE220 (LL601 rice, EURL method)	(100 copies/µL) 0.15 mL
5211511801	Genomic DNA A2704-12 soy (ACS-GMØØ5-3)	(100 copies/µL) 0.15 mL
5211512801	Genomic DNA A5547-127 soy (ACS-GMØØ6-4)	(100 copies/µL) 0.15 mL
5211515201	Genomic DNA CV127 soy (BPS-CV127-9)	(100 copies/µL) 0.15 mL
5211515101	Genomic DNA DP305423-1 soy (DP-3Ø5423-1) (10% GMO, made from CRM BF426d)	(100 copies GMO/µL) 0.15 mL
5211515301	Genomic DNA DP356043-5 soy (DP-356Ø43-5) (10% GMO, made from CRM BF425d)	(100 copies GMO/µL) 0.15 mL
5211514501	Genomic DNA MON87701 soy (MON-877Ø1-2)	(100 copies/µL) 0.15 mL
5211511901	Genomic DNA MON89788 soy (MON-89788-1)	(100 copies/µL) 0.15 mL
5211500601	Genomic DNA Roundup Ready™ soy (GTS-40-3-2, MON-Ø4Ø32-6)	(100 copies/µL) 0.15 mL
5211507001	Genomic DNA H7-1 sugarbeet (KM-ØØØ71-4) 100% GMO (from ERM BF419b)	(100 copies/µL) 0.15 mL
<b>Control DNA for real-time PCR detection of GMOs in concentrations close to the LOD level</b>		
5211513902	Genomic DNA MON810 maize (MON-ØØ81Ø-6)	(20 copies GMO/µL), 20 µL
5211513920	Genomic DNA MON810 maize (MON-ØØ81Ø-6)	(20 c. GMO/µL), 10 x 20 µL
5211514002	Genomic DNA T25 maize (ACS-ZMØØ3-2)	(20 copies GMO/µL), 20 µL
5211514020	Genomic DNA T25 maize (ACS-ZMØØ3-2)	(20 c. GMO/µL), 10 x 20 µL
5211513602	Genomic DNA RT73 rapeseed (MON-ØØØ73-7)	(20 copies GMO/µL), 20 µL
5211513620	Genomic DNA RT73 rapeseed (MON-ØØØ73-7)	(20 c. GMO/µL), 10 x 20 µL
5211513702	Genomic DNA MS8 rapeseed (ACS-BNØØ5-8)	(20 copies GMO/µL), 20 µL
5211513720	Genomic DNA MS8 rapeseed (ACS-BNØØ5-8)	(20 c. GMO/µL), 10 x 20 µL
5211513802	Genomic DNA Rf3 rapeseed (ACS-BNØØ3-6)	(20 copies GMO/µL), 20 µL
5211513820	Genomic DNA Rf3 rapeseed (ACS-BNØØ3-6)	(20 c. GMO/µL), 10 x 20 µL
5211514102	Genomic DNA LL62 rice (ACS-OSØØ2-5)	(20 copies GMO/µL), 20 µL
5211514120	Genomic DNA LL62 rice (ACS-OSØØ2-5)	(20 c. GMO/µL), 10 x 20 µL
5211514202	Genomic DNA MON4032-6 soy (MON-Ø4Ø32-6)	(20 copies GMO/µL), 20 µL
5211514220	Genomic DNA MON4032-6 soy (MON-Ø4Ø32-6)	(20 c. GMO/µL), 10 x 20 µL

Cat #	Item	Packaging
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## Control DNAs Plant Species

5211516101	Genomic DNA Almond ( <i>Prunus dulcis</i> )	(100 copies/ $\mu$ L) 0.15 mL]
5211516001	Genomic DNA Brazil Nut ( <i>Bertholletia excelsa</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211515601	Genomic DNA Corn/Maize ( <i>Zea mays</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211501801	Genomic DNA Cotton ( <i>Gossypium</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211515901	Genomic DNA Lupine ( <i>Lupinus albus</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211515701	Genomic DNA Rapeseed/Canola ( <i>Brassica napus</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211514601	Genomic DNA Rice ( <i>Oryza sativa</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211515801	Genomic DNA Sesame ( <i>Sesamum indicum</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211515501	Genomic DNA Soy ( <i>Glycine max</i> )	(100 copies/ $\mu$ L) 0.15 mL
5211520403	Genomic DNA Alfalfa ( <i>Medicago sativa</i> )	(10 ng/ $\mu$ L) 0.15 mL
5211520303	Genomic DNA Squash ( <i>Cucurbita</i> )	(10 ng/ $\mu$ L) 0.15 mL
5211520203	Genomic DNA Papaya ( <i>Carica papaya</i> )	(10 ng/ $\mu$ L) 0.15 mL

Cat #	Item	Description
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## DNAnimal Kits

The DNAnimal product line enables you to identify animal species in your sample. If not specified otherwise, the kits can be used on both, high ROX® AND low ROX® real-time cyclers. See also our animal species control DNA on the next page.

5422220310	<b>DNAnimal Screen Halal IPC (LR)</b> Kit for simultaneous RT-PCR detection of pork and horse/donkey DNA on MX3005P/MX3000P, ABI7500 and LC480, with IPC.	96 multiplex real-time PCR reactions, all reagents and controls included, for up to 44 samples
5427200400	<b>Color Compensation Analysis Kit for LC480</b>	for DNAnimal Screen Halal kit
5422211210	<b>DNAnimal Screen Tetrapod IPC</b> Kit for detection of mammalian and avian DNA; reptiles, amphibians and fish are not detected.	96 real-time PCR rxns, all reagents and controls included, for up to 46 samples
5422221110	<b>DNAnimal Screen Ruminant IPC</b> Kit for detection of ruminant DNA with IPC, validated on Mx3005P / Mx3000P, ABI7500(Fast), ABI7900HT, LC480 and CFX96 Touch	96 real-time PCR rxns, all reagents and controls included, for up to 46 samples
5422220610	<b>DNAnimal Ident Beef IPC</b> Kit for identification of bovine DNA, with internal positive control (IPC) (detects besides <i>Bos taurus</i> also bison and different <i>Bos</i> species)	96 real-time PCR reactions, all reagents and controls included, for up to 46 samples
5422220510	<b>DNAnimal Ident Pork IPC</b> Kit for identification of porcine DNA (both, <i>Sus scrofa domestica</i> and <i>scrofa</i> ), with IPC	96 real-time PCR reactions, all reagents and controls included, for up to 46 samples
5422220710	<b>DNAnimal Ident Meat IPC</b> for identification of bovine and porcine DNA, with internal positive control (IPC)	2x48 RT-PCR rxns, all reagents and positive control DNA included
5422221010	<b>DNAnimal Ident Chicken IPC (LR)</b> for identification of chicken ( <i>Gallus gallus</i> ) DNA Validated on MX3005P/3000P, ABI7500, LC480.	96 real-time PCR rxns, all reagents and controls included, for up to 46 samples
5422220410	<b>DNAnimal Ident Duck IPC</b> Kit for identification of duck ( <i>Anas platyrhynchos</i> and <i>Cairina moschata</i> ) DNA, with IPC	96 real-time PCR rxns, all reagents and controls included, for up to 46 samples
5422220810	<b>DNAnimal Ident Goose IPC</b> Kit for identification of duck DNA, with internal positive control (IPC)	96 real-time PCR rxns, all reagents and controls included, for up to 46 samples
5422220110	<b>DNAnimal Ident Horse IPC (LR)</b> Kit for identification of horse DNA, with IPC. Validated on MX3005P/MX3000P, ABI7500.	96 real-time PCR reactions, all reagents and controls included, for up to 46 samples
5422220910	<b>DNAnimal Ident Water Buffalo IPC (LR)</b> Kit for identification of water buffalo DNA, with IPC. Validated on MX3005P/3000P, ABI7500, LC480.	96 real-time PCR reactions, all reagents and controls included, for up to 46 samples

# Animal Species Meat Standards and Control DNA

Cat #	Item	Packaging
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## Meat Standards

The following meat standards can be used i.e. for threshold testing or method validation:

5122700102	1% w/w horse in beef meat standard i.e. for threshold testing according to EURL-AP	2,0 +/- 0,1 g minced meat, frozen
5122700202	1% w/w pork in beef meat standard i.e. for threshold testing	2,0 +/- 0,1 g minced meat, frozen
5122700302	0,1% w/w pork in beef meat standard i.e. for threshold testing	2,0 +/- 0,1 g minced meat, frozen
5122700502	1% w/w beef in pork meat standard i.e. for beef threshold testing	2,0 +/- 0,1 g minced meat, frozen

## Control DNAs Animal Species

5222580804	Genomic DNA Cat ( <i>Felis silvestris</i> )	0.2 mL [1 ng/μL]
5222581304	Genomic DNA Cattle ( <i>Bos taurus</i> )	0.2 mL [1 ng/μL]
5222580504	Genomic DNA Chicken ( <i>Gallus gallus</i> )	0.2 mL [1 ng/μL]
5222580604	Genomic DNA Dog ( <i>Canis lupus familiaris</i> )	0.2 mL [1 ng/μL]
5222582404	Genomic DNA Duck	0.2 mL [1 ng/μL]
5222580404	Genomic DNA Fallow Deer ( <i>Dama dama</i> )	0.2 mL [1 ng/μL]
5222581804	Genomic DNA Goat ( <i>Capra hircus</i> )	0.2 mL [1 ng/μL]
5222580204	Genomic DNA Goose ( <i>Anser</i> )	0.2 mL [1 ng/μL]
5222580304	Genomic DNA Hare ( <i>Lepus europaeus</i> )	0.2 mL [1 ng/μL]
5222581004	Genomic DNA Horse ( <i>Equus caballus</i> )	0.2 mL [1 ng/μL]
5222580904	Genomic DNA Human ( <i>Homo sapiens</i> )	0.2 mL [1 ng/μL]
5222582004	Genomic DNA Kangaroo ( <i>Macropus giganteus</i> )	0.2 mL [1 ng/μL]
5222582104	Genomic DNA Ostrich ( <i>Struthio camelus</i> )	0.2 mL [1 ng/μL]
5222581504	Genomic DNA Pig ( <i>Sus scrofa domestica</i> )	0.2 mL [1 ng/μL]
5222580704	Genomic DNA Rabbit ( <i>Oryctolagus cuniculus</i> )	0.2 mL [1 ng/μL]
5222581904	Genomic DNA Red Deer ( <i>Cervus elaphus</i> )	0.2 mL [1 ng/μL]
5222581204	Genomic DNA Roe Deer ( <i>Capreolus capreolus capreolus</i> )	0.2 mL [1 ng/μL]
5222582204	Genomic DNA Sika Deer ( <i>Cervus nippon</i> )	0.2 mL [1 ng/μL]
5222581404	Genomic DNA Sheep ( <i>Ovis aries</i> )	0.2 mL [1 ng/μL]
5222581604	Genomic DNA Springbok ( <i>Antidorcas marsupialis</i> )	0.2 mL [1 ng/μL]
5222581104	Genomic DNA Turkey ( <i>Meleagris gallopavo</i> )	0.2 mL [1 ng/μL]
5222580004	Genomic DNA Water Buffalo ( <i>Bubalus bubalis</i> )	0.2 mL [1 ng/μL]
5222581704	Genomic DNA Wild Boar ( <i>Sus scrofa scrofa</i> )	0.2 mL [1 ng/μL]
5212582401	Genomic DNA Atlantic Halibut ( <i>Hippoglossus hippoglossus</i> )	150 μL [100 copies/μL]
5212583401	Genomic DNA Bison ( <i>Bison bison</i> )	150 μL [100 copies/μL]
5212581301	Genomic DNA Cattle ( <i>Bos taurus</i> )	150 μL [100 copies/μL]
5212583501	Genomic DNA Chamoise ( <i>Rupicapra rupicapra</i> )	150 μL [100 copies/μL]
5212580501	Genomic DNA Chicken ( <i>Gallus gallus</i> )	150 μL [100 copies/μL]
5212582801	Genomic DNA Donkey ( <i>Equus asinus</i> )	150 μL [100 copies/μL]
5212582501	Genomic DNA Duck	150 μL [100 copies/μL]
5212583701	Genomic DNA Gemsbok ( <i>Oryx gazella</i> )	150 μL [100 copies/μL]

Cat #	Item	Packaging
<b>Control DNAs Animal Species (continued)</b>		
5212583801	Genomic DNA Gnu ( <i>Connochaetes</i> )	150 µL [100 copies/µL]
5212581801	Genomic DNA Goat ( <i>Capra hircus</i> )	150 µL [100 copies/µL]
5212582901	Genomic DNA Horse ( <i>Equus caballus</i> )	150 µL [100 copies/µL]
5212584001	Genomic DNA Kudu ( <i>Tragelaphus</i> )	150 µL [100 copies/µL]
5212581501	Genomic DNA Pig ( <i>Sus scrofa domestica</i> )	150 µL [100 copies/µL]
5212584101	Genomic DNA Pigeon ( <i>Columba livia</i> )	150 µL [100 copies/µL]
5212584201	Genomic DNA Quail ( <i>Coturnix coturnix</i> )	150 µL [100 copies/µL]
5212584301	Genomic DNA Rat ( <i>Rattus rattus</i> )	150 µL [100 copies/µL]
5212581401	Genomic DNA Sheep ( <i>Ovis aries</i> )	150 µL [100 copies/µL]
5212581101	Genomic DNA Turkey ( <i>Meleagris gallopavo</i> )	150 µL [100 copies/µL]
5212584401	Genomic DNA Yak ( <i>Bos mutus</i> )	150 µL [100 copies/µL]

# Food pathogens

Cat #	Item	Description
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## BACGene Kits

The BACGene product line is designed for real-time PCR identification of food pathogens.

We will soon offer an AFNOR FN-certified RT-PCR kit for *Salmonella* spp. detection from food.  
Please contact us for details.

# General Terms & Conditions of Sale (GTCS) of Eurofins GeneScan GmbH

## 1. Scope of application and derogations from the GTCS

1.1 The following General Terms and Conditions of Sale ("GTCS"), in the version applicable on the conclusion of the contract, shall be applicable to all purchase orders (i.e. offers) which are accepted by the Contractor or its subsidiaries or sister companies (referred to hereinafter as "ES") (the undertaking with which individual purchase orders are placed shall be referred to hereinafter as the "Contractor"). They shall also apply to purchase orders made by telephone that are not confirmed in writing and to those purchase orders that arise through the provision of samples. A contract subject to these GTCS shall arise as a consequence of the Contractor's acceptance of a purchase order. This shall occur either through (a) the Contractor's performance of the purchase order (in such a case the written confirmation of the Contractor shall not be required) or (b) the Contractor's written acceptance of the purchase order.

1.2 Apart from the managing director and the authorised representatives (holder of *Prokura*) of the Contractor, no employee, representative/agent or sub-contractor of ES shall be entitled to authorise any derogation from the provisions of the GTCS or to waive their application or to bind the Contractor in any manner which would lead to the applicability of any contrary provisions which in terms of their content might conflict with the GTCS or take precedence over them. Such a modification or waiver of the applicability of the GTCS shall only be binding upon the Contractor to the extent that it is recorded or given in writing and is signed by the managing director of the Contractor or by one of its authorised representatives (holder of *Prokura*).

## 2. Placing of purchase orders; non-applicability of contrary contractual terms and conditions; no order for collection

2.1 In order to be placed effectively, a purchase order must be issued by a Customer using its letterhead by post, fax or electronic form of communication or by using an ES-approved order form ("Sample Submission Form") or an electronic order form. It shall furthermore be necessary to have reached an agreement at the date of the placement of purchase order in relation to all of the necessary commercial details which are not covered by these GTCS (including price, estimated period for performance and the delivery date). On request, the Customer must immediately confirm in writing those purchase orders which have been placed by means of telephone. In the event that a Customer provides to the Contractor samples, this shall also be deemed to be the placement of a purchase order. The Contractor shall not be obliged to commence any analysis before all of the terms of the purchase order are absolutely clear and prior to having been provided with all of the necessary information.

2.2 To the extent that no contrary provisions are expressly agreed in writing and signed by a managing director or an authorised representative (holder of *Prokura*) of the Contractor, the General Terms & Conditions of Business of a Customer shall be without any effect, even if such Customer refers or has referred at some point in time to its General Terms & Conditions of Business. Furthermore, any earlier acceptance of special terms and

conditions in the context of a previous purchase order (including special provisions in relation to price) shall not mean that such special conditions shall be accepted in the future in the context of any subsequent purchase orders. Each purchase order which is accepted by the Contractor shall to such an extent be viewed as a separate contract between the Contractor and the Customer.

2.3 In the event that the Customer subsequently stipulates additional requirements in connection with an existing contract, the Contractor shall be entitled to invoice a management and administration fee in the amount of up to € 25.00. Should the Customer stipulate additional requirements in connection with samples which have already arrived at the laboratory, this shall be deemed to constitute a new purchase order and may lead to a corresponding postponement of the previously estimated delivery dates.

2.4 The collection and delivery of the sample or any other logistical measures shall be a matter for the Customer and shall be carried out or organised by the Customer at the Customer's own risk. If the Contractor renders assistance in organising the transport or in logistical measures outside the laboratory, the Contractor shall act in the name of and on the authority of the Customer, so that the risk of transport or any delays in transport, e.g. by messengers/couriers, shall be the Customer's responsibility and the consequences shall be borne by the Customer. The messenger/courier is not the Contractor's vicarious agent and shall contract only with the Customer.

## 3. Prices and payment terms

3.1 Prices shall be stipulated "ex works" (Incoterms 2010) and shall not include packaging, which shall be invoiced separately. This shall not apply should any provisions to the contrary be agreed. All additional costs or expenditure (e.g. such costs and expenditure as may be incurred by the Contractor in connection with the contract) shall be borne by the Customer.

3.2 Prices shall be stipulated net of any taxes payable (including value-added tax) on the basis of the rates applicable at the date of the issue of the invoice.

3.3 Any query or objection in relation to an invoice must be submitted within a period of 45 days from the date of receipt of such invoice. In the event that the Customer has doubts in relation to the accuracy of the results of any analysis, this shall not entitle the Customer to withhold payment, insofar as the defective nature of the results of the analysis and the Customer's counter-claims resulting therefrom are not undisputed, are not acknowledged by the Contractor or have not been judicially established. Should the Customer default on any payment, all sums owed to the Contractor by the Customer – including any sums owed pursuant to other contracts – shall become immediately due and payable. The Contractor shall be entitled in the event of default to apply default interest of 8 percentage points above the base rate. The right of the Contractor to assert its claims in respect of any demonstrable damage suffered as a result of such default which may exceed such rate shall not be affected hereby.

3.4 If at the request of the Customer a new invoice must be issued, the Contractor may invoice an administration fee of €15.00.



3.5 Payments shall be made by way of a bank transfer or by direct debit. Other means of payment shall require the prior consent of the Contractor. The Customer shall be obliged to provide the required bank account details to the Contractor.

3.6 The Contractor shall be entitled to make the execution of a contract contingent upon the advance payment of up to 100% of the estimated consideration payable.

#### **4. Obligations of the Customer in connection with the delivery of samples or materials**

4.1 Samples or materials must be in a condition which permits the production of reports/analyses or the production of the products commissioned without any problems arising. The Contractor shall be entitled to carry out an examination of any sample or materials on their delivery in order to establish their condition prior to the processing of the sample or the preparation of a report or their use in the production process. The Customer shall be obliged to bear the costs of such an inspection on delivery, should it emerge that the sample or materials do not comply with the requirements set out in section 4.1. In the event that the result of the inspection on delivery reveals that analysis or production will be impossible or only possible in more onerous circumstances than originally anticipated – for example because the sample or materials contain foreign materials or substances in respect of which the Customer has provided no information or if they have degraded or decomposed – the Contractor shall be entitled to withdraw from the contract or to suspend the performance of the purchase order. In such a case the Customer shall bear the costs which the Contractor has incurred until such point in time.

4.2 The Customer warrants and has an obligation towards the Contractor to ensure that all samples sent to the Contractor for purposes of analysis are in a safe and stable condition. The Customer must ensure and hereby warrants that the samples shall constitute no danger to the property and any other legal interests of the Contractor or ES and to their employees and other agents or third parties – neither on the facility premises of the Customer nor during shipment, in the laboratory or on any other premises belonging to the Contractor or ES. If a sample is dangerous or represents special waste or hazardous materials, the Customer must inform the Contractor in writing prior to its dispatch. At the request of the Contractor, the Customer shall be obliged to inform the Contractor of any substances known to the Customer and of the exact origin of the sample. It shall be the responsibility of the Customer to comply with the statutory provisions relating to special waste and hazardous materials. Such obligations shall also relate to the provision of information, the inscription/labelling on the packaging, shipment and removal/disposal. In particular, the employees or other agents of the Contractor must be informed of any health or safety concerns in connection with the samples. Such concerns shall include in particular those in connection with known or presumed toxic substances or any other contamination of a sample and the presumed level of contamination, as well as any risks to the property and other legal interests of the Contractor or ES and to their employees and other agents or third parties in connection with such contamination. In the event of any breach of these obligations, the Customer shall be liable for any costs, damage and any other prejudice which are incurred or suffered by the

Contractor or ES or their personnel or other agents as a result thereof; this shall be the case irrespective of whether such costs, damage or prejudice are incurred or suffered on the premises of the Customer (for instance in the context of the taking of a sample), during shipment, in the laboratory or on any other premises belonging to the Contractor or ES. Such liability shall also include a corresponding obligation to indemnify the Contractor and ES in the event of any proceedings being instigated against them by third parties. The Customer shall not be liable under the foregoing provisions if the Customer cannot be held responsible for the breach of contract.

4.3 The Customer shall bear the costs of the reasonable removal/disposal of special waste and hazardous materials which are incurred as a result of the nature of the samples provided by the Customer. This shall be the case irrespective of whether or not the sample has been designated as special waste or a hazardous material.

#### **5. Rights of title in the samples; storage of samples**

5.1 All samples shall be the property of the Contractor to the extent that this is necessary in order to perform the purchase order. To the extent that storage, which shall be invoiced separately, has not been agreed, the Contractor shall not be obliged to ensure the storage and/or refrigeration of any sample. If storage, which shall be invoiced separately, has been agreed, the Contractor shall take commercially reasonable measures in accordance with standard professional practices to store the samples.

5.2 The Contractor shall be entitled to dispose of or destroy sample material in order to prepare and carry out the analysis and to dispose of and destroy the actual samples immediately upon the completion of analyses, unless the Parties have agreed in writing to a retention. If a specific retention period has been agreed, the Contractor shall be entitled to dispose of or destroy the sample without prior notice on the expiry of such period. Should such disposal or destruction be subject to specific statutory provisions (e.g. in the case of special waste or hazardous materials), the Customer shall bear any costs which are incurred in connection therewith. In the event that the Customer requests the return of sample materials no longer required, the Contractor shall return such sample materials at the expense and risk of the Customer.

#### **6. Delivery dates and completion periods**

6.1 Delivery dates and completion periods shall be estimates and shall not be binding upon the Contractor. The Contractor shall nonetheless be required to use its commercially reasonable endeavours to comply with the estimated periods.

6.2 Results shall as a rule be sent on the completion of the analysis by e-mail and/or post or by any other electronic means to those persons designated by the Customer on placing the purchase order.

#### **7. The transfer of title and other rights; residual rights in the results of the analyses**

7.1 The rights of title and any other rights in the results of the analyses, products, equipment, software or similar services



provided by the Contractor to the Customer shall be retained by the Contractor until such time as all invoices relating thereto have been paid in full by the Customer. Until such invoices have been paid in full the Customer shall have no rights of title in or any other rights to exploit the services provided. Should the Customer be in arrears with the settlement of any sums which are payable to the Contractor or ES, the Contractor shall be entitled to suspend the execution of the purchase order and any other work being carried out on behalf of the Customer. This shall also apply if the payment which is late is payable pursuant to another purchase order.

7.2 Even after a payment has been made in full by the Customer, the Contractor shall have the right to retain the results of any analyses carried out and to make use of such results in an anonymised form which does not permit the identification of the Customer, and to publish such results to the extent that this does not cause a prejudice to any legitimate interests of the Customer which are known to the Contractor.

#### **8. Limitations on warranties and responsibilities; liability and indemnity obligations of the Customer**

8.1 Insofar as nothing to the contrary has been agreed, the service to be provided by the Contractor shall be limited to performing analyses and preparing an analysis report. The Contractor has no obligation to give advice or provide more detailed expert opinions unless expressly agreed otherwise in the individual case. Purchase orders shall be executed under the conditions available to the Contractor in accordance with the state of the art. It is not necessary to comply with specific DIN/EN rules. The Contractor shall select a method suitable for fulfilling its contractual obligations and may also abandon this method and choose another suitable method. Results cannot be 100% accurate and/or relevant in all cases. Depending on the method of analysis, the result of the analysis notified to the Customer shall correspond to a value in a range of values that may result from various methods of analysis according to the state of the art. Analyses, interpretations, estimates, consultancy services and inferences shall be completed, arrived at, compiled, provided and drawn with a commercially reasonable degree of care. However, the Contractor cannot warrant that such analyses, interpretations, estimates, consultancy services and inferences shall in all cases be accurate or wholly relevant. The warranty period shall be twelve months from the date of acceptance. This shall not affect the statutory limitation periods for claiming damages. The parties agree that services, goods, etc. shall at all events be deemed accepted unless the Customer notifies the Contractor that such acceptance has been refused, within one week of the date of receipt. In each case the Customer shall be obliged to verify the cogency of the results, interpretations, estimates and inferences provided by the Contractor with a reasonable degree of care and at its own risk, in the event that the Customer wishes to rely on such results, interpretations, estimates and inferences in any material connection. If the results of the analysis cause the Customer to carry out cost-intensive or other far-reaching measures, the Customer must contact the Contractor before the measure is taken in order to give the latter the opportunity to verify or at least discuss the results of the analysis. Should it be apparent that the results are inaccurate, the Customer shall be obliged to contact the Contractor immediately

and to inform it of such fact. In the event that the Customer is a merchant within the meaning of the German Commercial Code [*Handelsgesetzbuch*] and does not comply with this obligation, the performance given by the Contractor shall be deemed compliant with the agreement. Section 377 of the German Commercial Code [*Handelsgesetzbuch*] shall be analogously applied *mutatis mutandis*.

8.2 Each report on an analysis shall relate exclusively to the sample analysed by the Contractor. To the extent that the Contractor is not expressly commissioned to produce a sample schedule (including a determination of which samples of which raw materials and finished products are to be analysed with which frequency), subject to the specification of the precise scope of the analyses to be carried out, the Contractor shall have no liability should it emerge that the sample schedule and/or the specification of the scope of the analysis is insufficient or inappropriate. The same shall apply if and to the extent that the Customer does not follow relevant recommendations made by the Contractor.

8.3 Unless otherwise agreed in writing between the Parties, the Customer and the Contractor shall be the sole parties to the contract. No contract shall be formed for the benefit or the protection of third parties that may give rise to obligations for the Contractor or ES vis-à-vis these third parties if and to the extent that nothing else results from the contract and/or these GTCS.

8.4 The Customer undertakes to indemnify the Contractor and ES and their personnel or other representatives/agents against all third-party claims based on a breach of duty by the Customer unless the Customer cannot be held responsible. This particularly applies to third-party claims asserted due to the fact that a sample is dangerous or unstable.

8.5 If the storage of samples has been agreed in writing, contrary to the provisions of section 5, the Customer must provide advance information regarding any specifics of storage and ensure that the Contractor accepts these as part of the agreement.

8.6 In the event that the Contractor delivers any software to the Customer, the Customer must use such software in accordance with any applicable licence conditions, instructions and manuals.

#### **9. Limitation on liability**

9.1 Claims against the Contractor, its parent company, subsidiaries and sister companies and their manual workers, employees, representatives/agents, directors of the company and advisers (referred to hereinafter as "liability-privileged persons") in respect of compensation for damages suffered and costs incurred shall be excluded, unless it is a case of intent, gross negligence or the breach of a material contractual obligation. A material contractual obligation shall be understood as every contractual obligation essential to the proper performance of the contract on whose fulfilment the Customer is entitled to rely.

9.2 Insofar as there is no evidence of intent, the liability of liability-privileged persons shall be limited to compensation for foreseeable damage that is typical for the type of contract. It is generally incumbent on the customer to insure himself sufficiently against other damage.

9.3 The liability of such liability-privileged persons under the German Product Liability Act [*Produkthaftungsgesetz*], in the event of the breach of any warranty and in respect of claims for damages arising from the death, physical injury or damage to the health of a person, shall not be limited by these GTCS.

9.4 It shall be a prerequisite for the acceptance of a purchase order by the Contractor that the Customer shall compensate and indemnify liability-privileged persons in respect of all losses, infringements, claims and costs which the latter may suffer or incur as a result of the wrongful conduct of the Customer. The placing of a purchase order by the Customer shall constitute the provision of such an indemnity.

## **10. The carrying out of new analyses**

Complaints in relation to test results may only be notified subject to the provisions set out in section 8.1. In each case where the inaccuracy of the first results of the analyses is not established, the Customer shall bear the costs of any new tests it requests or the verification of the foregoing tests.

## **11. Force majeure**

In the case of delays, errors, damage or other problems which are caused by events or circumstances which were unforeseeable by the Contractor or which are beyond its control or which result from compliance with official orders, legislation or regulations the time limits shall be prolonged for the duration of the obstruction. If it is unreasonable for the Customer to accept an associated delay in the execution of the order, the Customer shall be entitled to withdraw from the contract.

## **12. Confidentiality and the processing of customer data**

12.1 The Contractor shall be entitled to store and process any personal or commercial data which it receives in any manner whatsoever from the Customer in accordance with the applicable statutory provisions relating to data protection, irrespective of whether or not such data is provided directly by the Customer or by a third party. The Contractor shall be obliged to use its commercially reasonable endeavours to deal with such data confidentially in accordance with the law.

12.2 For the purposes of the execution of the purchase order, personal data – for example in relation to corporate bodies, contact persons and/or project managers – shall be processed and utilised. The Customer is aware that in order to be in a position to ensure the provision of the best service possible, including the use of existing capacity and know-how, not only personal data but also contract-related data, such as any issues examined in the context of an analysis and the results thereof, may be disclosed to affiliated Group undertakings in Germany, Austria or Switzerland which are the holders of an accreditation pursuant to ISO 17025. The affiliated Group undertakings shall be bound by a corresponding confidentiality agreement, a copy of which shall be provided on request. In addition the Contractor may process and make use of such data for the purposes of winning further contracts. The Customer may prohibit such processing and use by so notifying the Contractor.

12.3 The Contractor shall be obliged to use its commercially reasonable endeavours to keep all results of the analyses and service reports confidential. These obligations shall not apply to the rights of the Contractor pursuant to section 7.2 or to any requirement to adduce proof of an entitlement to receive payment for services rendered.

12.4 The results of any analyses shall be produced and disclosed for the exclusive use of the Customer only and shall not be made available to third parties for any purposes whatsoever without the prior written consent of the Contractor. Furthermore, the Customer shall be obliged to ensure confidentiality in connection with all of the services provided by the Contractor. In addition, any results and the composition of products and software which are delivered by the Contractor, as well as the results of any analyses, may not be published or used for purposes other than internal purposes without the prior written consent of the Contractor. Furthermore, in the event that such written consent is given, the Customer shall remain (a) liable for any consequences of the disclosure of such results to a third party and any reliance placed by such third party on such results, and (b) hereby undertakes to indemnify the liability-privileged persons (see section 9.1) in respect of any claims brought by a third party as a result of the disclosure of such results and/or any reliance placed thereon and any – actual or alleged – damage resulting therefrom.

## **13. Governing law / Place of jurisdiction**

All contracts to which these GTCS apply shall be governed by German law. The provisions of the United Nations Convention on Contracts for the International Sale of Goods (CISG) shall not apply. The exclusive place of jurisdiction shall be the location of the Contractor, to the extent that the Customer is a merchant, a legal person in accordance with public law or special fund constituted in accordance with public law or has no registered office in Germany. However, the claimant shall alternatively be entitled to commence proceedings before the Arbitral Tribunal of the German Institution of Arbitration (DIS e.V.), instead of before the ordinary courts. In such a case the Arbitral Tribunal shall have exclusive jurisdiction. The place of arbitration shall be Hamburg.

As of January 2013

# Eurofins GeneScan real-time PCR kits: FAQ

## “Which kits can I use on my cycler?”

For use of our kits, your cycler needs filters/detection for the following dyes. Quenchers shown in brackets, ROX™ is used as normalizer.

Kit / Kit line	FAM	HEX	Cy5	JOE	Cal 610	ATTO 532	TAMRA	(non-fluorescent)	ROX/normalized
<b>GMScreen RT 35S/NOS (IPC)</b>	x	x	x					(x)	LR
<b>GMO Screen RT 35S/NOS/FMV (IPC) for LC480/MX3005P</b>	x	x	x		x			(x)	NR
<b>GMO Screen RT 35S/NOS/FMV (IPC) for ABI 7500 (Fast)</b>	x		x	x			x	(x)	LR
<b>GMO Screen RT IPC (LR) bar/pat</b>	x		x	x				(x)	LR
<b>GMOIdent RT</b>	x							(x)	LR+HR
<b>GMOIdent RT (IPC), DNAnimal (IPC)</b>	x	x					(x) or	(x)	LR+HR
<b>GMOQuant</b>	x						(x) or	(x)	LR, HR, UMM
<b>GMOQuant Duplex</b>	x		x			x		(x)	LR
<b>DNAnimal Halal</b>	x	x	x					(x)	LR

## “What is the right ROX concentration for my cycler?”

Many of our real-time PCR kits are made for either cyclers needing high ROX levels or low ROX levels. If your cycler is a high-ROX, low-ROX or even a no-ROX cycler, can be found in the (non-comprehensive) table below. For no-ROX cyclers, please use low-ROX kits if no NR kits are available.

HR (high ROX)	LR (low ROX)	NR (no ROX)
ABI 7000	ABI 7500 / 7500 FAST	Bio-Rad CFX96
ABI 7300	ABI StepOne/StepOne (Plus)	Roche LC480
ABI 7700	ViiA 7	Rotorgene 3000
ABI 7900	Agilent MX3000P	Rotorgene 6000
MJ Research/Bio-Rad Opticon 2	Agilent MX3005P	Agilent MX3005P
	Agilent MX4000	Agilent MX3000P
	Bio-Rad iQ5	Agilent AriaMX
	MJ Research/Bio-Rad Chromo 4	
	Eppendorf Mastercycler realplex4	

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