KYLT®

LIVESTOCK DIAGNOSTIC PRODUCTS

SWINE

KYLT IN VITRO DIAGNOSTIC SOLUTIONS
2024

PASSION FOR INNOVATION

KYLT®

REAL-TIME (RT-) PCR ASSAYS FOR SWINE

Kylt® provides veterinary diagnostic laboratories with products for the highly sensitive and precise detection of pathogens affecting livestock as well as products for the subsequent characterization of these pathogens.

Kylt® products are developed and manufactured in Germany by veterinary diagnostic experts and are put through rigorous tests in our own daily high-throughput diagnostic routine with samples from all over the world.

WHY KYLT® IS THE BEST CHOICE FOR YOU

At Kylt® we pride ourselves on supplying easy-to-use products, excellent customer service and the broad range of assays available on the market. We consistently review and update our products and expand our product range to include newly appearing strains and meet upcoming diagnostic needs. To enable the convenient and economic combination of Real-Time PCR assays in a single run, nearly all Kylt® assays can be run with our universal Kylt® Standard profile for both Real-Time PCR and Real-Time RT-PCR. This saves time, reduces use of consumables and minimizes the blocking of laboratory infrastructure. In addition, all our detection products use the same pipetting volumes. All Real-Time PCR cyclers available on the market are compatible with the Kylt® product range, no specialized hardware or software is necessary. Of course the whole process at Kylt®, including R&D, production, storage and shipment as well as customer support is certified to ISO 9001. Furthermore, selected kits have the MicroVal® certificate for proprietary method, are registered at the German federal authority, Friedrich Loeffler Institut (FLI), as well as in diverse other countries.

KYLT® TRAINING

In regular intervals we provide an in-depth training for our customers at our site in Germany. This two-day training in small groups teaches the fundamentals for using Real-Time PCR in veterinary diagnostic applications from the sampling to the result. Learn in small groups and prepare your own samples and run your own tests. Discuss with like-minded experts from all around the world and the Kylt® team directly. For more information, please contact us at **training.kylt-DE@san-group.com**.

KYLT® SOFTWARE

With the ongoing development and expansion of our Kylt® product catalogues and increasing complexity of, especially multiplexed, assays as well as various settings for different Real-Time PCR cyclers, you may hesitate to introduce Real-Time PCR in your laboratory. For these issues we have developed our Kylt® Software to simplify entering sample data, transfering assay settings and evaluating the results, as well as accredited documentation, reporting and LIMS-connection. Please contact us for further information including supported qPCR cyclers at **kylt-DE@san-group.com**.

REGULATORY INFORMATION AND AVAILABILITY

All Kylt® products are available as detection Kits, with all necessary components included. The availability of the products depends on the specific regulatory environment in your country. If you need more information on our Kylt® products and their availability in your region or if you have a specific demand for a product not listed please visit us on **www.kylt.eu** or contact us at **kylt-DE@san-group.com.**

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KYLT® REAL-TIME (RT-) PCR SETUP

Kylt® Real-Time (RT-) PCR kits comprise all reagents including enzyme mixes and pathogen-specific primers and probes for an accurate pathogen detection.

The control reagents included in the kit verify the validity of the assay. Pathogen specific Positive Controls help monitor the efficiency of the assay. With the Negative Control any contamination of the kit components or used consumables can be ruled out.

The products are additionally provided with Internal Controls to verify sufficient sampling, correct sample preparation and the overall Real-Time PCR run.

The validity check of the assay can be supplemented using further Kylt® control assays listed on page 9. For more information, please contact us at **kylt-DE@san-group.com**.

Kylt® Real-Time (RT-) PCR setups work with commonly used fluorescent dyes FAM, HEX, Cy5 and TXR. For detailed information about channels needed for the individual products, please visit us on **www.kylt.eu**.

KYLT® BACTERIAL PATHOGENS AND PARASITES

	Product Name	Tested Parameter Description	Reactions 100	Reactions 25
	Bordetella bronchiseptica / parapertussis	**Bordetella bronchiseptica / parapetussis** Separate and species-specific detection	31545	31546
	Brucella spp.	**Brucella spp.** Genus-specific screening / detection	31655	31656
	Campylobacter spp	**Campylobacter spp.** Genus-specific screening / detection	31402	31403
	Campylobacter jejuni, coli & lari	**Campylobacter jejuni, coli & lari** Separate and species-specific detection	31451	31452
	Chlamydiaceae	**Chlamydiaceae screening** Genus-specific screening / detection	31647	31648
	Cp. abortus	**Chlamydophila abortus** Species-specific detection	31649	31650
	Cp. psittaci	**Chlamydophila psittaci** Species-specific detection	31637	31638
	C. difficile A & B qPCR	**Clostridioides difficile Toxin genes A & B** Separate and gene-specific detection	31320	31321
	Clost. perf.	**Clostridium perfringens** Separate and gene-specifc detection of Major Toxins: cpa, cpep, cpb, cpi & Minor Toxins: netB, cpen, cpb2	31034	31035
	Coxiella burnetii	**Coxiella burnetii** (Q-Fever) Species-specific detection	31653	31654
	Cryptosporidium spp.	**Cryptosporidium spp.** Genus-specific screening / detection	31322	31323
	Cryptosporidium parvum	**Cryptosporidium parvum** Species-specific detection	31324	31325
NEW	**Erysipelothrix rhusiopathiae**	**Erysipelothrix rhusiopathiae** (Erysipelas) Species-specific detection	31770	31771
	GPS	**Glaesserella parasuis** formerly Haemophilus parasuis (HPS) Species-specific detection	31372	31373
	PIA	**Lawsonia intracellularis** Species-specific detection	31213	31214
	Leptospira, pathogenic	**Leptospira, pathogenic** Genus-specific detection	31657	31658
	Listeria monocytogenes	**Listeria monocytogenes** Species-specific detection	31651	31652
	Mycoplasma spp.	**Mycoplasma spp.** Genus-specific detection	31116	31117
	MHRS Triplex	**Mycoplasma hyorhinis & Mycoplasma hyosynoviae** Separate and species-specific detection	31376	31377
	MHP	**Mycoplasma hyopneumoniae** Species-specific detection	31378	31379

KYLT® BACTERIAL PATHOGENS AND PARASITES – CONTINUED

Product Name	Tested Parameter Description	Reactions 100	25
M. suis	**Mycoplasma suis** Species-specific detection	31543	31544
P. multocida & toxA qPCR	**Pasteurella multocida** Separate and species-specific as well as toxA gene detection	31334	31335
Toxoplasma gondii	**Toxoplasma gondii** Species-specific detection	31312	31313

KYLT® ACTINOBACILLUS PLEUROPNEUMONIAE SERIES

Product Name	Tested Parameter Description	Reactions 100	25
APP	**Actinobacillus pleuropneumoniae** Species-specific screening / detection	31439	31440
APP Serotype 2,5,9/11	**APP Serotype 2, 5, 9/11** Separate and serotype-specific detection of type 2, 5 & 9/11	31487	31488
APP Serotype 6,7,8	**APP Serotype 6, 7, 8** Separate and serotype-specific detection of type 6, 7 & 8	31489	31490
APP Serotype 12,13,18	**APP Serotype 12, 13, 18** Separate and serotype-specific detection of type 12, 13 & 18	31491	31492

KYLT® BRACHYSPIRA SERIES

Product Name	Tested Parameter Description	Reactions 100	25
Brachyspira spp.	**Brachyspira spp.** Genus-specific screening / detection	31199	31200
B. hampsonii	**Brachyspira hampsonii** Species-specific detection	31483	31484
BHP Triplex	**Brachyspira hyodysenteriae & Brachyspira pilosicoli** Separate and species-specific detection	31702	31703
B.hyo/B.pilo/Law.int	**Brachyspira hyodysenteriae, Brachyspira pilosicoli & Lawsonia intracellularis** Separate and species-specific detection	31531	31532
B. innocens	**Brachyspira innocens** Species-specific detection	31485	31486
B. intermedia	**Brachyspira intermedia** Species-specific detection	31481	31482

KYLT® E. COLI SERIES

Product Name	Tested Parameter Description	Preferential application: Suckling piglets	Preferential application: Weaners	Reactions: 100	Reactions: 25
Sta, Stb, LT	**E. coli Virulence Factors Sta, Stb, LT** Separate and gene-specific detection	×	×	31706	31707
F4, F5, F6	**E. coli Virulence Factors F4, F5, F6** Separate and gene-specific detection	×	×	31710	31711
EAST, AIDA, paa	**E. coli Virulence Factors EAST, AIDA, paa** Separate and gene-specific detection	×		31714	31715
FimA, FimH, F41	**E. coli Virulence Factors FimA, FimH, F41** Separate and gene-specific detection	×		31718	31719
F18, F41, Stx2e	**E. coli Virulence Factors F18, F41, Stx2e** Separate and gene-specific detection		×	31722	31723

KYLT® SALMONELLA SERIES

Product Name	Tested Parameter Description	Reactions: 100	Reactions: 25
Salm spp 2.0 no ExM MICROVAL® | nen	**Salmonella spp.** Species-specific detection Validated according to ISO 16140	31302	-
Salmonella Choleraesuis	**Salmonella Choleraesuis** Serovar-specific detection	31525	3156
ST DIVA	**Salmonella Typhimurium & ST mutant (Histidine-Adenine-auxotroph)** Strain used in live vaccines e.g. by CEVA	31855	31856

KYLT® STREPTOCOCCUS SUIS SERIES

Product Name	Tested Parameter Description	Reactions: 100	Reactions: 25
Streptococcus suis	**Streptococcus suis** Separate and gene-specific detection	31380	31381
Streptococcus suis 1	**Streptococcus suis serotype 1** Separate and gene-specific detection	31382	31383
Streptococcus suis 2	**Streptococcus suis serotype 2** Separate and gene-specific detection	31384	31385
Streptococcus suis 7	**Streptococcus suis serotype 7** Separate and gene-specific detection	31386	31387
Streptococcus suis 9	**Streptococcus suis serotype 9** Separate and gene-specific detection	31388	31389
Streptococcus suis epf, mrp, sly	**Streptococcus suis factors epf, mrp, sly** Separate and gene-specific detection of extracellular protein factor, muramidase released protein and suilysin	31541	31542

KYLT® VIRAL PATHOGENS

Product Name	Tested Parameter Description	Reactions 100	Reactions 25
ASF qPCR FLI-C 070	**African Swine Fever Virus** (ASFV) Species-specific detection Licensed by Friedrich-Loeffler-Institute (FLI-C 070)	31806	31807
ASF/CSF Triplex	**African Swine Fever Virus & Classical Swine Fever Virus** (ASFV & CSFV) Separate and species-specific detection	31824	31825
CSF	**Classical Swine Fever Virus** (CSFV) Species-specific detection	31816	31817
EMCV	**Encephalomyocarditis Virus** Species-specific detection	31515	31516
EV-G	**Enterovirus G** Species-specific detection	31537	31538
FMD	**Foot and Mouth Disease Virus** (FMDV) Species-specific detection	31863	31864
PCV-2	**Porcine Circovirus Type 2** Species-specific detection	31394	31395
PCV-2 Typing	**Porcine Circovirus Type 2** Separate detection of PCV-2 genotypes a, b and d	31871	31872
PCV-3	**Porcine Circovirus Type 3** Species-specific detection	31843	31844
PEDV	**Porcine Epidemic Diarrhea Virus** Species-specific detection	31227	31228
PPV	**Porcine Parvovirus** Species-specific detection	31396	31397
Rotavirus A	**Rotavirus Type A** (RV-A) Species-specific detection	31211	31212
Rotavirus C	**Porcine Rotavirus Type C** (PRV-C) Species-specific detection	31215	31216
PRRSV NA/EU	**Porcine Reproductive & Respiratory Syndrome Virus** Separate detection of EU and NA strains, including HP-strains	31203	31204
PSV-A	**Porcine Sapelovirus A** Species-specific detection	31535	31536
PTV-A	**Porcine Teschovirus A** Species-specific detection	31533	31534

KYLT® VIRAL PATHOGENS – CONTINUED

Product Name	Tested Parameter Description	Reactions 100	Reactions 25
TGE	**Transmissible Gastroenteritis Virus** (TGEV) Species-specific detection	31529	31530
TGE/PEDV	**Transmissible Gastroenteritis & Porcine Epidemic Diarrhea Virus** (TGEV & PEDV) Separate and species-specific detection	31447	31448
Swine Delta Coronavirus	**Swine Delta Coronavirus** (SDCV) Species-specific detection	31392	31393

KYLT® INFLUENZA SERIES

Product Name	Tested Parameter Description	Reactions 100	Reactions 25
Infl. A FLI-B672	**Influenza Virus Type A** (exogenous control, IC-RNA) Species-specific detection Licensed by Friedrich-Loeffler-Institute (FLI-B 072)	31068	31069
IVA beta RT-qPCR FLI-C 024	**Influenza Virus Type A** (endogenous control, ß-Actin) Species-specific detection Licensed by Friedrich-Loeffler-Institute (FLI-C 024)	31163	31164
Influenza A-H1 pdm	**Influenza Virus Type A Subtype H1 Pandemic** (Novel swine-like H1) H-Type specific detection	31454	31455
Influenza Virus Type D	**Influenza Virus Type D** (IVD) Species-specific detection	31358	31359

KYLT® ENZYME MIXES

comprise outstanding performance and stability, including Real-Time PCR with or without Reverse Transcription.

Product Name	Description	Art.-No 100 reactions
2x qPCR-Mix	2 x concentrated PCR Mix for Real-Time PCR	31867
2x RT-qPCR-Mix	2 x concentrated PCR Mix for one-step Real-Time RT-PCR	31868

KYLT® QUANTITATIVE STANDARDS

support pathogen quantification of respective samples. These standards consist of a set of four to six quantitative standards and one negative control. They comprise a dilution series with defined genome equivalents.

Product Name	Description	Reactions	Art.-No.
Brachyspira spp Standard	To be used with the corresponding PCR Kit Kylt® Brachyspira spp. (31199 / 31200)	10	31841
Influenzavirus A Standard	To be used with the corresponding PCR Kit Kylt® IVA beta (31163 / 31164) or Kylt® Infl. A (31068 / 31069	10	31423
Lawsonia intracellularis Standard	To be used with the corresponding PCR Kit Kylt® PIA (31213 / 31214)	10	31839
Mycoplasma hyopneumoniae Standard	To be used with the corresponding PCR Kit Kylt® MHP (31378 / 31379)	10	31840
PCV-2 Standard	To be used with the corresponding PCR Kit Kylt® PCV-2 (31394 / 31395)	10	31409

KYLT® REAL-TIME (RT-)PCR CONTROLS

Product Name	Description	Reactions	Art.-No.
Host Cells	Detection of both host's beta-actin mRNA and spiked Internal Control RNA, Control reaction kit	100 25	31106 31107
IC-RNA	Internal Control RNA	100	31132
Negative Control	-	1 mL	31133

KYLT® NUCLEIC ACID PREPARATION

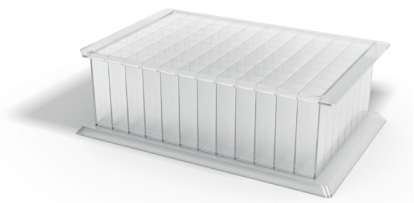
Kylt® RNA / DNA Purification Kits are intended for the purification of high quality RNA and DNA from a vast variety of veterinary sample matrices or from pure bacterial or viral culture isolates. The spin-column based kit is intended for manual application in low- to medium-throughput. The magnetic bead based kit can be automated on any magnetic bead processor or almost all liquid handlers for medium- to high-throughput. Please inquire for application support.
Kylt® DNA Extractionmixes are intended for simplified and economic DNA extraction from pure bacterial isolates or bacterial enrichments only.

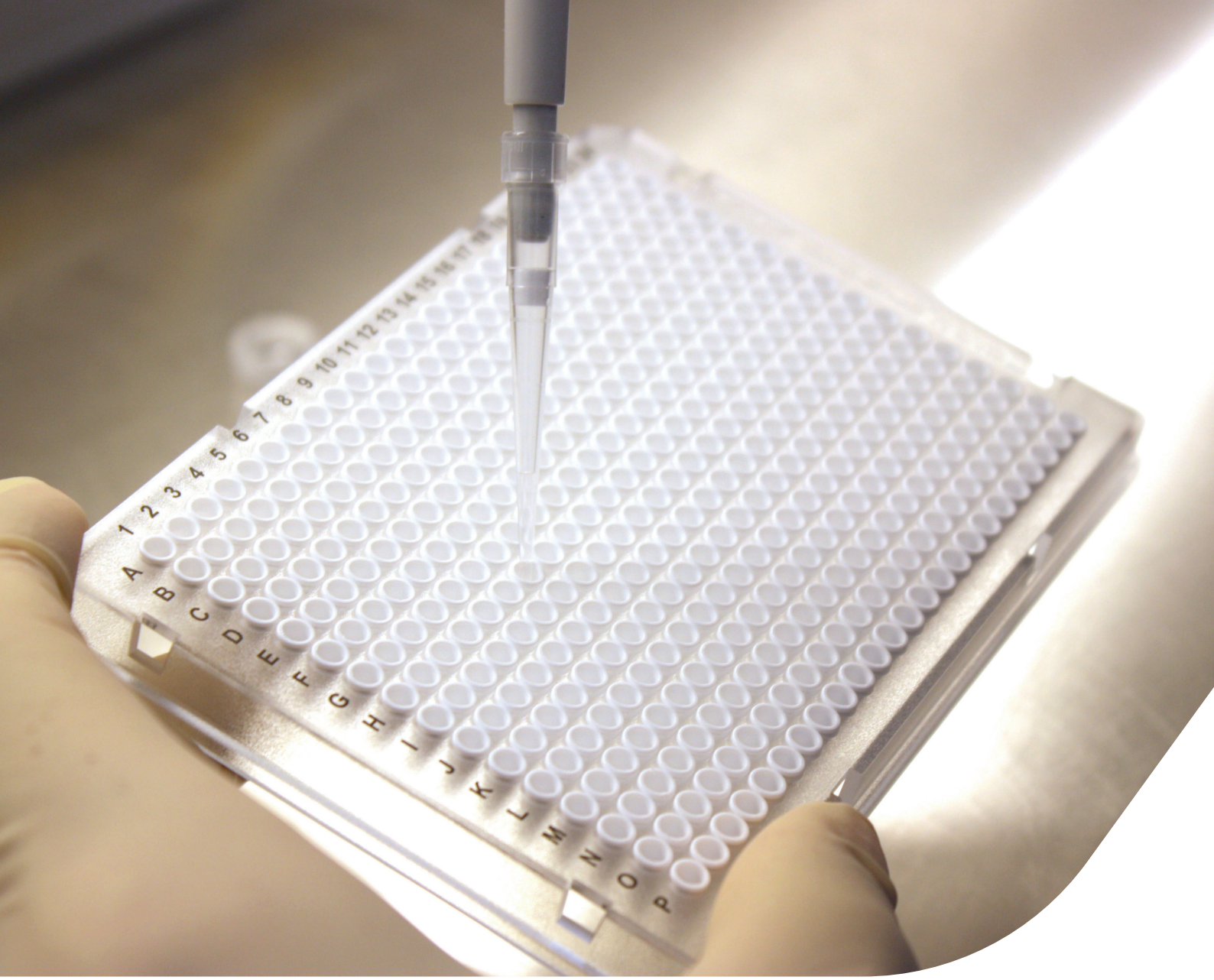
	Product Name	Description	Content / Rxn	Art.-No
	RNA / DNA Purification	Combined RNA and DNA purification from veterinary samples (spin-column based)	50	31315
	RNA/DNA Purification HTP	Magnetic bead based combined RNA and DNA purification kit for veterinary diagnostic samples. Suitable for Kylt® Purifier and Kylt® Purifier 48	4× 96	31575
NEW	**Salmonella Purification HTP**	Magnetic bead based DNA purification from Salmonella pre-enrichment samples. Suitable for Kylt® Purifier and Kylt® Purifier 48	4× 96	31433
	DNA Extractionmix II	DNA extraction from pure bacterial isolates or bacterial enrichments	100	31398
	DNA Extractionmix III	DNA extraction as above from gram-positive bacteria (e.g. Listeria monocytogenes)	100	31404

KYLT® PURIFICATION SYSTEM AND CONSUMABLES

The **Kylt® Purifier** and **Kylt® Purifier 48** are our new solutions for the automated magnetic bead-based purification of RNA and DNA from any sample. These systems feature extremely fast processing with a run-time of about 30 minutes (excluding lysis) for up to 96 samples to purify DNA and RNA from diagnostic samples or to purify DNA from Salmonella pre-enrichment-samples.

	Product Name	Description	Content / Rxn	Art.-No
	Purifier	Purification system for magnetic bead based kits. Up to 96 samples are processed in under 30 minutes. Intended for high-throughput laboratories	1 unit	31436
NEW	**Purifier 48**	Purification system for magnetic bead based kits. Up to 48 samples are processed in under 30 minutes. Intended for low to medium throughput laboratories	1 unit	31748
	RNA/DNA Purification HTP	Magnetic bead based combined RNA and DNA purification kit for veterinary diagnostic samples. Suitable for Kylt® Purifier and Kylt® Purifier 48	4× 96	31575
NEW	**Salmonella Purification HTP**	Magnetic bead based DNA purification from Salmonella pre-enrichment samples. Suitable for Kylt® Purifier and Kylt® Purifier 48	4× 96	31433
	Purifier Spin Tips	Plate with 96 separate spin tips, used by the Kylt® Purifer to mix the well contents by stirring. Sufficient for 480 samples	5 Plates	31434
	Purifier Plates	Plates to be used for the several reactions and reagents during automated nucleic acid purification. Sufficient for 320 to 480 samples (depending on device and protocol)	20 Plates	31435





KYLT®

STANDS FOR ...

HIGH QUALITY

Development and manufacturing in Germany are ISO 9001 certified

RELIABILITY

Highly satisfactory and reliable high-throughput routine diagnostic

ACCURACY

Sensitive, precise and fully validated detection of pathogens

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For veterinary diagnostic use only. For in vitro use only. Regulatory requirements vary by country, these products may not be available in your geographic area.

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