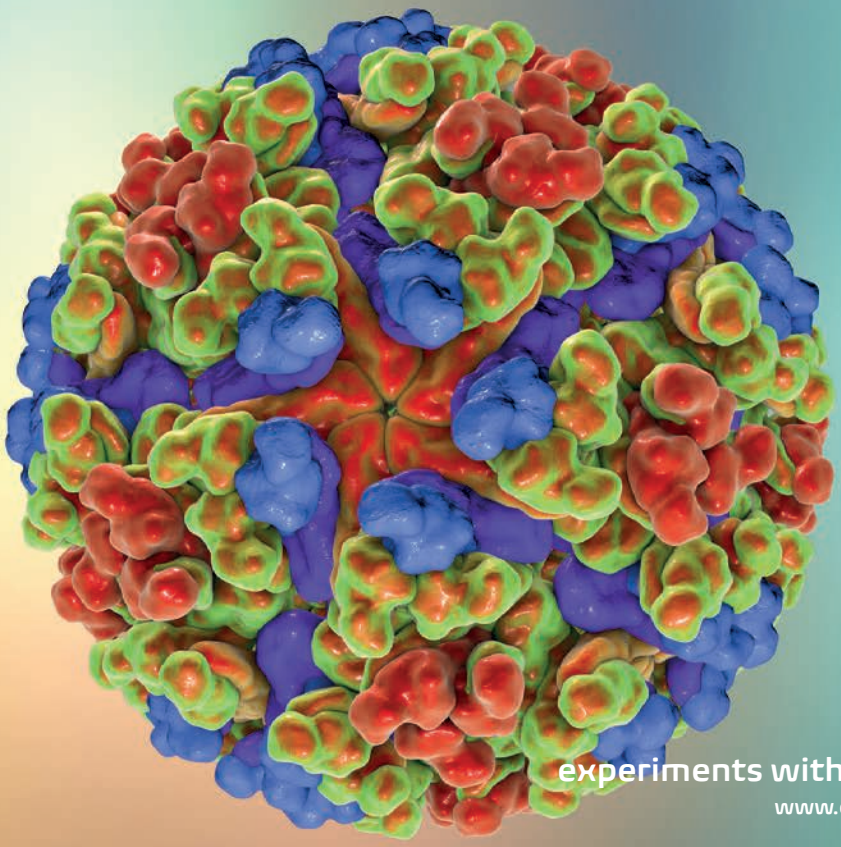
EURx®
MOLECULAR
BIOLOGY
PRODUCTS

smART series



experiments with quality

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smART Reverse Transcriptase

E1376-01	10 000 U	50 reactions
E1376-02	4 x 10 000 U	200 reactions

smART Reverse Transcriptase is an engineered viral reverse transcriptase with reduced RNase H activity, increased thermostability and processivity. smART Reverse Transcriptase provides a very robust and highly specific cDNA synthesis from a wide variety of RNA samples in a wide range of temperatures (50-65°C).

smART First Strand cDNA Synthesis kit

E0804-01	2 000 U	10 reactions
E0804-02	10 000 U	50 reactions
E0804-03	4 x 10 000 U	200 reactions

smART First Strand cDNA Synthesis Kit is designed for convenient cDNA synthesis. Product is based on smART Reverse Transcriptase engineered to provide the highest performance. Kit provides a very reliable and consistent cDNA synthesis with any RNA samples in a wide range of temperatures (50-65°C). cDNA can be used directly in PCR and qPCR reactions with a variety of EURx thermostable DNA polymerases and Master Mixes.

smART RT-PCR kit

E0805-01	25 reactions
E0805-02	100 reactions

smART RT-qPCR kit

E0806-01	25 reactions
E0806-02	100 reactions

smART RT-PCR Kit and smART RT-qPCR Kit are complete systems for first and second strand synthesis in a two-step reaction. Kits provide all necessary components optimized for the best performance in standard PCR and qPCR.

smART Combo First Strand cDNA Synthesis Kit for RT-qPCR

E0808-01	50 reactions
E0808-02	200 reactions

smART Combo First Strand cDNA Synthesis Kit for RT-qPCR is a complete system for efficient synthesis of first strand cDNA for two-step real time quantitative RT-PCR (RT-qPCR) applications. All kit components are compacted to three tubes minimizing time for assembling reactions and reducing possibilty of pipetting errors. cDNA obtained from this reaction is compatible with all EURx qPCR real time Master Mixes ensuring the best performance.

Fig.3 *RT-qPCR reaction targeting five different genes. 8 ng of total RNA isolated from Human blood with GeneMATRIX HUMAN BLOOD RNA Purification Kit (E3596) was used to synthesize total cDNA with oligo dT(20) and smART RT-qPCR kit. 2 µl of cDNA was used in qPCR reaction (25 µl reaction volume). Yellow line - Arginase I, 149 bp, ct=21,8; green line - Beta-tubulin, 131 bp, ct=19,6; red line - CD48 receptor, 103 bp, ct=17,3; violet line - Beta-actin, 112 bp, ct=14,6; blue line - GAPDH, 110 bp, ct=16,2.*

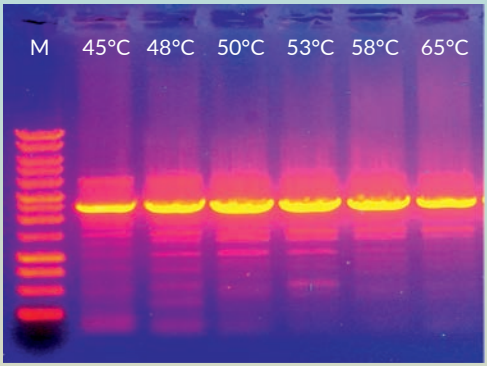

Fig. 1 *RT-PCR targeting S.scrofa Glycogen Phosphorylase in a wide range of temperatures. 0.1 µg of total RNA from S.scrofa liver isolated with GeneMATRIX UNIVERSAL RNA Purification Kit (E3598) was used to synthesize cDNA using oligo dT(20) and smART Reverse Transcriptase (20 µl reaction volume). 2 µl of cDNA reaction was used in a second strand synthesis with OptiTaq DNA Polymerase (E2600).*
M - Perfect Plus™ 1 kb DNA Ladder (E3131).

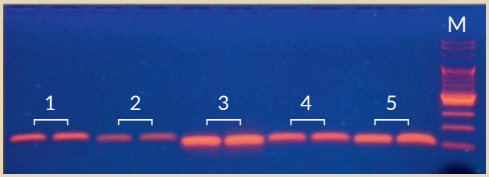

Fig.2 *RT-PCR reaction targeting five different genes. 8 ng of total RNA isolated from Human blood with GeneMATRIX HUMAN BLOOD RNA Purification Kit (E3596) was used to synthesize total cDNA with oligo dT(20) and smART Combo First Strand cDNA Synthesis Kit for RT-qPCR. 2 µl of cDNA was used in PCR reaction (25 µl reaction volume). 1. Arginase I, 149 bp; 2. Beta-tubulin, 131 bp; 3. CD48 receptor, 103 bp; 4. Beta-actin, 112 bp; 5. GAPDH, 110 bp; M - Perfect™ 100 bp DNA Ladder (E3134).*