

SOLIS BIODYNE OÜ

A: Teaduspargi 9, 50411 Tartu, Estonia E: info@solisbiodyne.com T: +372 7409 960

F: +372 7402 079

SOLIScript® 1-step SolisGreen® Kit

Highly sensitive dye-based one-step RT-qPCR

solisbiodyne.com



Features

 $SOLIScript^{\$} \ 1-step \ Solis Green^{\$} \ Kit \ is \ an \ optimized \ solution \ for \ highly \ sensitive \ real-time \ one-step \ RT-PCR \ (RT-qPCR) \ using \ intercalating \ dye \ detection \ via \ the \ SYBR^{\$}/FAM \ fluorescence \ channel.$

Contains all the components necessary, except RNA template and primers, to perform cDNA synthesis and qPCR in a single tube.

Applications

- Gene expression analysis and absolute quantification
- Pathogen detection and quantification
- Low-copy gene detection
- Gene knockdown validation
- miRNA profiling and quantification
- GMO characterization

Accurate quantification across a broad dynamic range

30-day stability at room temperature!

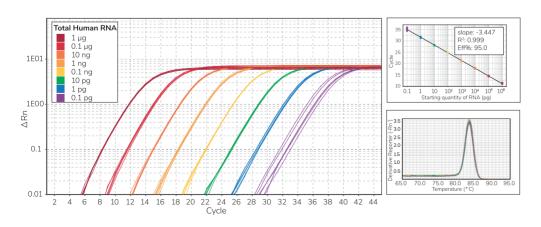
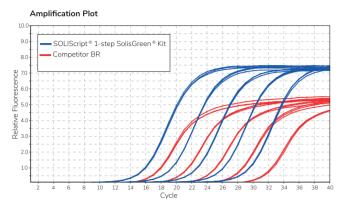
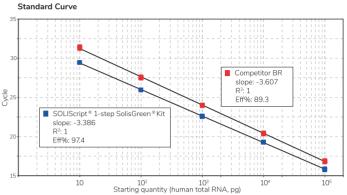


Figure 1. One-step RT-qPCR targeting PPIA (Peptidylprolyl Isomerase A) gene fragment (101 bp) using eight 10-fold serial dilutions (0.1 pg-1 µg, six replicates at each concentration) of Human Reference RNA (total RNA pooled from 10 human cell lines). Reactions were run on Applied BioSystems™ QuantStudio™ 6 Flex qPCR cycler using the following protocol: 15 min RT at 50 °C, 10 min enzyme activation at 95 °C, followed by 40 cycles of 95 °C for 10 sec, 60 °C for 20 sec, 72 °C for 20 sec.

Sensitive amplification and bright fluorescent signal

Figure 2. The human B2M (Beta-2-Microglobulin) target was quantified using five 10-fold serial dilutions (10 pg−100 ng, three replicates at each concentration) of Human Reference RNA with either the SOLIScript® 1-step SolisGreen® Kit (blue) or 1-step dye-based RT-qPCR kit from Competitor BR (red). Reactions were run on Applied Biosystems™ QuantStudio™ 6 Flex according to each manufacturer's protocol.



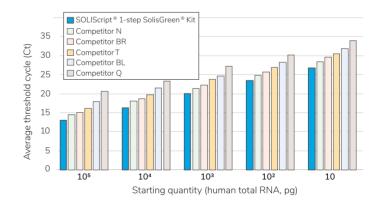


Kit components:

- 40x One-step SOLIScript® Mix contains an in silicoengineered SOLIScript® Reverse Transcriptase and RiboGrip™ RNase Inhibitor. SOLIScript® is a thermostable enzyme active at temperatures up to 60 °C to deliver highly specific results for templates with high levels of secondary structure. RiboGrip™ protects RNA from degradation by inhibiting RNase A and increases cDNA yield in reactions with low amounts of starting RNA.
- 5x One-step SolisGreen® Mix contains HOT FIREPol® DNA Polymerase, SolisGreen® dsDNA-intercalating dye and a ROX-based passive reference dye in a unique reaction buffer maximizing the performance of both reverse transcriptase and DNA polymerase in a single assay.
- Nuclease-free water

The lowest Ct values in competition with other vendors

Figure 3. The human B2M (Beta-2-Microglobulin) target was quantified by one-step RT-qPCR using five 10-fold serial dilutions (10 pg–100 ng, three replicates at each concentration) of Human Reference RNA (total RNA pooled from 10 human cell lines) with either the SOLIScript® 1-step SolisGreen® or 1-step dye-based RT-qPCR kits from other vendors. Reactions were run according to each manufacturer's protocol.



Ordering information

Product	CAT. NO.	RXN / 20 μl
SOLIScript® 1-step SolisGreen® Kit	08-63-0000S (sample) 08-63-00250	50 250

