gDNA removal kit

Rapid and complete removal of gDNA from RNA preps

gDNA removal kit uses a heat labile dsDNase to remove gDNA from RNA preps prior to reverse transcription.

The kit is based on a recombinant heat labile dsDNase which is irreversibly inactivated at low temperatures. This enables an inactivation step including heating to moderate temperatures only (58°C), which is gentle enough to preserve both quality and quantity of all present RNA. Reverse transcription can be performed in the same tube, minimizing pipetting steps and reducing hands-on time.

Most techniques used for RNA isolation yield RNA with significant amounts of contaminating genomic DNA (gDNA), potentially resulting in false and inaccurate mRNA quantification. This is particularly a problem in the quantification of low-copy transcripts or small samples. The gDNA removal kit efficiently removes gDNA from RNA preps to levels below the detection limit of RT-qPCR.

Citations: 4 View Online »

Ordering Information Order Online »

ENZ-KIT136-0050	50Reactions
ENZ-KIT136-0250	250Reactions

Manuals, SDS & CofA View Online »

- Removes gDNA from RNA prior to reverse transcription in the same tube
- HL-dsDNase is inactivated without reducing quality or quantity of RNA
- Minimizes pipetting steps and suitable for high throughput experiments

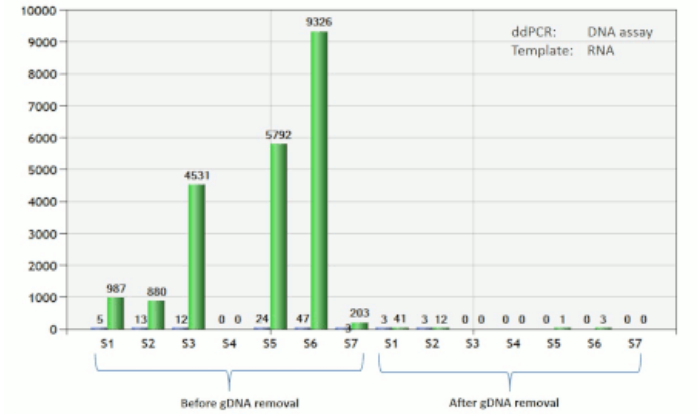

Fig 3. Droplet digital PCR (ddPCR)-based DNA assay performed with 7 RNA preparations prior to RNA sequencing. Results courtesy of a clinical laboratory based in the UK obtained during the R&D of their RNA NGS workflow.

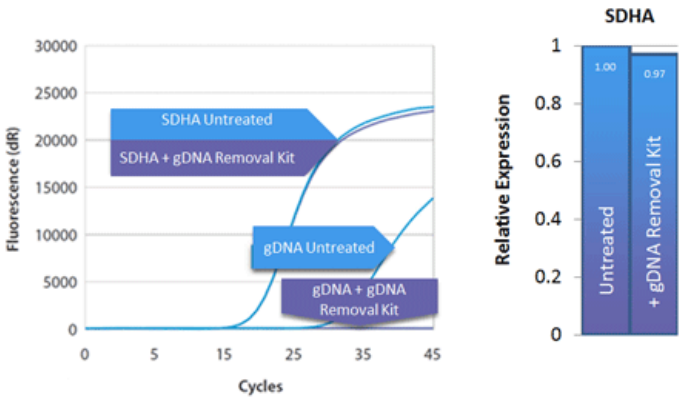

Fig 2. mRNA subjected to the gDNA removal kit protocol. All contaminating gDNA was removed while RNA was left unharmed. Compared to the untreated control, no reduction in quantified cDNA (SDHA) was detected.

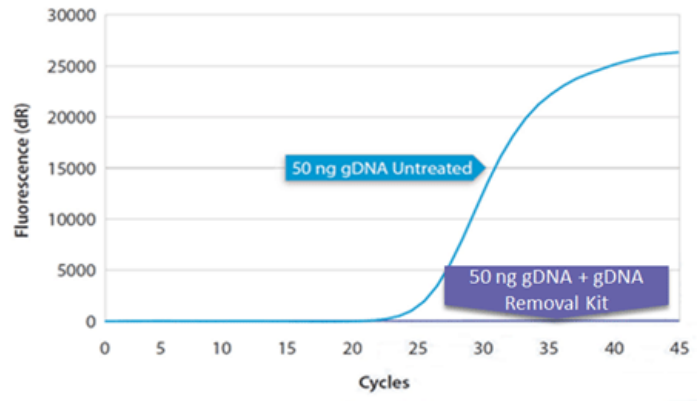

Fig 1. The gDNA removal kit used in RNA prep prior to RT-qPCR. The gDNA removal kit removes at least 50ng of gDNA in a 10µl reaction volume.

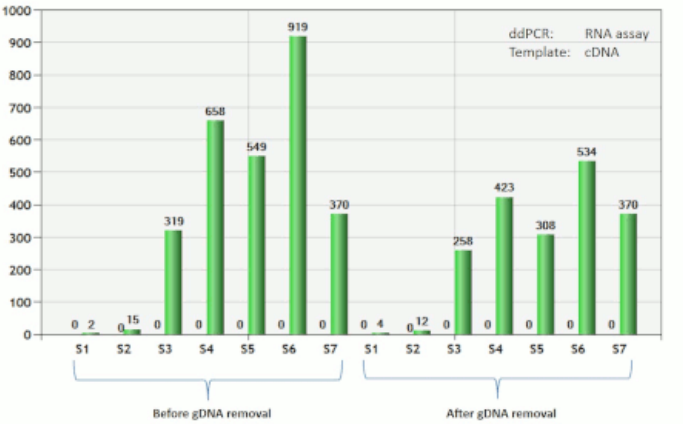

Fig 4. Droplet digital PCR (ddPCR)-based RNA assay performed with 7 cDNA preparations prior to RNA sequencing. Results courtesy of a clinical laboratory based in the UK obtained during the R&D of their RNA NGS workflow.

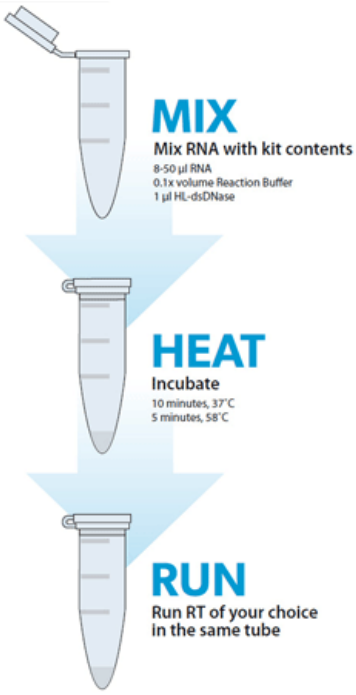

Fig 3. Simple protocol for removing genomic DNA from RNA

Handling & Storage

Short Term Storage	-20°C
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application Notes	For the removal of gDNA from RNA prior to reverse transcription.
Contents	10x reaction buffer Heat-labile dsDNase
Quality Control	Tested for absence of RNase.
UniProt ID	C9YSL6_PANBO

Last modified: May 29, 2024

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com