



Cut&Go gDNA Removal Kit

Cat. No.	size
E0110-01	50 reactions
E0110-02	250 reactions

Kit components:

	E0110-01	E0110-02
dsDNase HL	50 µl	250 µl
10 x Reaction Buffer	100 µl	500 µl

Storage Conditions:

Store at -20°C, avoid freeze/thaw cycles.

Cut&Go gDNA Removal Kit is used for elimination of genomic DNA prior to reverse transcription. Thanks to unique thermolabile dsDNase, which is irreversibly inactivated at moderate temperature (5 minutes at 58°C or 15 minutes at 55°C) RNA integrity and quality is preserved. Enzyme is highly specific towards dsDNA keeping RNA and ssDNA such as primers and cDNA intact. The kit allows simplified workflow which combines genomic DNA elimination and cDNA synthesis into one-tube procedure.

Applications:

- Genomic DNA removal from RNA samples prior first strand cDNA synthesis, RT-PCR and RT-qPCR.
- Removal of DNA template after *in vitro* transcription.

Protocol:

The recommended reaction volume is 10 µl. It should not exceed the input limit of the following RT reaction. Use RNase-free tubes, gloves and filter tips.

Mix the following

RNA sample	variable
10 x Reaction Buffer	1 µl
dsDNase HL	1 µl
Water, nuclease free	up to 10 µl

1. Mix the following components in RNase-free tubes.
2. Gently mix the samples and spin down.
3. Incubate for 5 min at 37°C or 10 min at 25°C.
4. Inactivate enzyme for 5 min at 58°C then chill on ice.
5. Add reverse transcription reagents directly to the same tube and proceed with first strand cDNA synthesis protocol according manufacturer's instructions.

Quality control:

dsDNase HL is functionally tested in removal of genomic DNA contamination from RNA sample and subsequent RT-qPCR amplification. The absence of RNase confirmed by appropriate quality test utilizing spectrophotometry assays of RNA sample concentration before and after incubation with enzyme.