gDNA Remover

Catalog No.: A0014

Description

The *EZ*Bioscience® gDNA Remover is able to digest double and single stranded DNA into oligo and mononucleotides. And it has been confirmed to be free of RNase activity. SO it is suitable for eliminating DNA from RNA preparations prior to sensitive applications, such as RT-PCR and RT-qPCR. It should be noted that no current RNA isolation procedure can completely remove the DNA. Because PCR can detect even a single molecule of DNA, the contaminating DNA should be first removed from RNA samples before RT-PCR, and parallel reactions should be run without adding reverse transcriptase to check for amplification of contaminating DNA. These precautions are especially recommended if PCR primers do not span an intron, if pseudogenes that lack the intron may be present in the target cells or tissue, or if the RNA will be used in quantitative RT-qPCR.

The *EZ*Bioscience® gDNA Remover is supplied as a ready-to-use master mix containing buffer reagents needed during the digestion of DNA. The contaminating DNA can be removed from RNA preparations in a 5 minute digestion at 25 ℃. Then the Stop Solution is added to complete the digestion process. The RNA sample can be used directly in reverse transcription after the addition of Stop Solution, and the cDNA synthesized in the following reverse transcription reaction will not be degraded.

Components

Components	A0014 (100 Rxns)
gDNA Remover	220 µl
Stop Solution	110 µl

Storage

Store at -20 ℃.

Caution

Do not vortex the gDNA Remover, or the gDNA Remover/RNA mixture before digestion is completed. Mix by gently flicking the tube or pipetting, and spin briefly to collect the liquid.

Protocol

1. Add to an RNase-free PCR tube:

   RNA in 4 ~ 8 µl water (≤ 2 µg)

   2 µl of gDNA Remover

2. Mix gently, and incubate for 5 minutes at 25 ℃.
3. Add 1 µl of Stop Solution to complete the digestion.
4. Add reagents for 20 µl reverse transcription reaction (RT buffer, primer, dNTPs, RNase inhibitor and reverse transcriptase) or RT-PCR directly to the gDNA Remover treated RNA. Proceed with reverse transcription or RT-PCR.