

Thermolabile dsDNase I

Life Science

Specific dsDNA removal | Inactivation at 55 °C

Levprot Bioscience's Thermolabile dsDNase I degrades specifically double-stranded DNA in presence of Mg²⁺ cations.

Ideal for workflows where temperature control is crucial, since it becomes inactive at 55 °C. For this reason, no downstream purification steps are required.

Available in both solution and freeze-dried formats, each with an RNase-free version.

Applications

- Genomic DNA removal from RNA samples prior to RT-PCR.
- Removal of DNA after cell lysis.
- Elimination of DNA contamination in dNTPs, primers and after mRNA transcription.
- Prevention of DNA contamination in RNA-seq assays.
- Use in molecular cloning and *in vitro* transcription.

Activity of Thermolabile dsDNase I at different temperatures

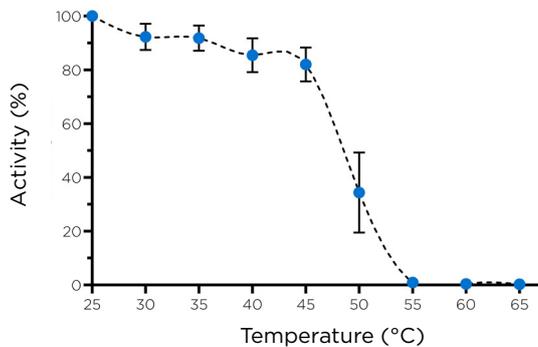


Figure 1

Thermolabile dsDNase I retains its activity at temperatures as high as 45 °C. From 45 °C onwards, the activity starts to diminish and is fully inactivated at 55 °C after 5 minutes with 1 mM DTT.

DNA amplification before and after Thermolabile dsDNase I treatment

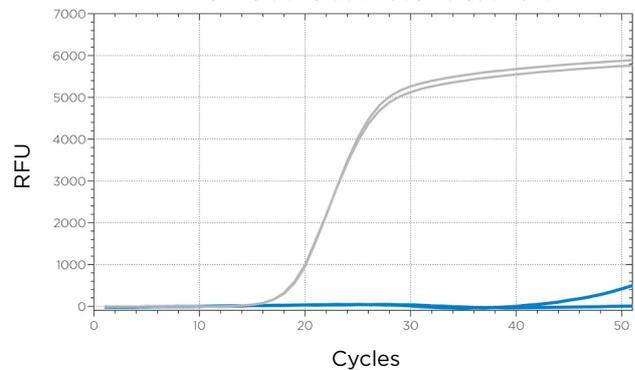


Figure 2

qPCR results showing DNA amplification in the grey (untreated) sample, whereas the sample treated with Levprot Bioscience's Thermolabile dsDNase I (blue) exhibits no amplification, indicating effective DNA removal.

How to remove DNA from RNA samples with our Thermolabile dsDNase I

