

Heat-labile Double-Strand Specific DNase (HL-dsDNase)

Product Information

Cat#	DIA-471
Description	A nuclease that cleaves DNA phosphodiester bonds, producing 5'-phosphate and 3'-hydroxyl oligonucleotides. Highly active and heat-labile; preferentially degrades dsDNA ($\geq 5000\times$ more active on dsDNA than ssDNA) while preserving ssDNA and RNA. Inactivated irreversibly after 5 min at 55 °C. Compatible with M-MLV and AMV reaction buffers, ideal for removing genomic DNA contamination in reverse transcription reactions.
Unit Definition	One unit (U) is defined as the amount of enzyme that increases the absorbance at 260 nm by 0.001 OD per minute under the assay conditions of high-molecular-weight dsDNA substrate at 25 °C and pH 5.0.
Storage	-20 °C
Inhibitors	Metal chelators, transition metals, SDS, and reducing agents
Applications	Preparation of RNA or ssDNA samples free of dsDNA; removal of genomic DNA contamination from RNA samples; removal of DNA templates after in vitro RNA transcription.
Product Overview	Product Components: 100 U: HL-dsDNase (2 U/μL): 50 μL 10$\times$ HL-dsDNase Buffer: 1 mL 20$\times$ Stop Solution: 100 μL 1000 U: HL-dsDNase (2 U/μL): 500 μL 10$\times$ HL-dsDNase Buffer: 1 mL x 2 20$\times$ Stop Solution: 1 mL Product Features: Double-stranded DNA-specific endonuclease Strong activity within 20–47 °C range



Creative Enzymes

Diagnostic Enzymes

Heat-labile Double-Strand Specific DNase (HL-dsDNase)

Heat inactivatable

Preserves RNA/protein activity at low temperatures without affecting RNA or ssDNA quality

Package

100/1000 U
