

## Servicebio<sup>®</sup> dsDNase (Thermolabile)

Cat. #: G3408-50UL

### Product Information

Product Name	Cat. No.	Spec.
dsDNase (Thermolabile)	G3408-50UL	50 µL

### Product Description/Introduction

The Servicebio dsDNase (thermolabile) is a heat-sensitive double chain deoxyribonuclease, which is recombined and expressed by *Pichia pastoris* and derived from Shrimp. The double stranded deoxyribonuclease specifically cleaves the phosphate diester bond in double stranded DNA to produce oligonucleotides with 5' -phosphate and 3' -hydroxyl ends. This product has strong specificity, does not degrade RNA and single stranded DNA. It is inactivated at 55 °C for 5 minutes. These features are very suitable for quick and safe removal of contaminating genomic DNA from RNA samples and simplify the workflow, and making genomic DNA remover and cDNA synthesis in a single tube.

**Source:** Shrimp derived deoxyribonuclease, recombinant expression of *Pichia pastoris*.

**Definition of enzyme activity:** One unit is the amount of enzyme required to increase the reaction system  $A_{260}$  by 0.001 per minute with double chain DNA as substrate at 25°C and pH 5.0.

**Purity:** ≥ 95% by SDS-PAGE detection.

**Inactivation or inhibition:** A 5-minute incubation at 55°C for complete inactivation of DNase (thermolabile); High activity of metal ions, chelating agents, SDS and reducing agents can inhibit the enzyme activity of dsDNase (thermolabile).

**Storage (Dilution) buffer:** 25 mM Tris-HCl, 2 mM MgCl<sub>2</sub>, 10 mM NaCl, 0.01% Triton X-100, 50% glycerol, pH 7.5.

**10×Reaction Buffer:** 200 mM Tris-HCl, 60 mM MgCl<sub>2</sub>, pH 8.3.

### Storage and Shipping Conditions

Ship with wet ice; Store at -20°C valid for 12 months.

### Product Contents

Component Number	Component	G3408-50UL
G3408-1	dsDNase (Thermolabile)	50 µL
G3408-2	10×Reaction Buffer	100 µL
	Manual	One copy

### Assay Protocol / Procedures

1. Add the following component into a sterile, nuclease-free tube on ice in the indicated order, mix gently and centrifuge briefly.

Component	Volume
dsDNase (Thermolabile)	1 µL
10×Reaction Buffer	1 µL
RNA sample	Up to 8 µL
Nuclease Free Water	To 10 µL

2. Incubate at 37°C for 2 minutes.
3. If the treated RNA sample is ready for reverse transcription, heat at 55°C for 5 minutes to fully inactivate dsDNase (thermolabile).

**Note**

1. When using the product, the enzyme should be on ice and stored immediately after use at -20°C.
2. For your safety and health, please wear safety glasses, gloves, or protective clothing.

**For Research Use Only!**