

## NUCLEASE FF

Recombinant endonuclease from *Serratia marcescens*

### Description

Nuclease FF is an advanced endonuclease sourced from *Serratia marcescens*, a microorganism renowned for its robust characteristics. This enzymatic product has no sequence specificity and excels in its ability to digest all forms of nucleic acids. It is subjected to a rigorous purification process, ensuring consistent performance and reliability for all intended endeavours.

### Key features

- suitable for all types of nucleic acids - single-stranded; double-stranded; circular, linear, and supercoiled DNA and RNA;
- exceptional activity to 3 - 5 bp fragments;
- remarkable stability across a diverse range of environmental conditions.

### Use

- designed for application in protein and molecular biology research and industry;
- ideal for tasks such as reduction of bacterial lysates viscosity, cell-clumping prevention, elimination of protein-DNA complexes etc.;
- no detectable proteolytic activity resulting to the perfect tool for nucleic acid contamination removal in protein purifications processes;
- high ability to indiscriminately cleave DNA/RNA strands, facilitating the complete digestion of nucleic acids;
- exceptional activity and stability rendering Nuclease FF suitable for use in all kinds of research and industrial processes that demand little to no DNA/RNA presence.

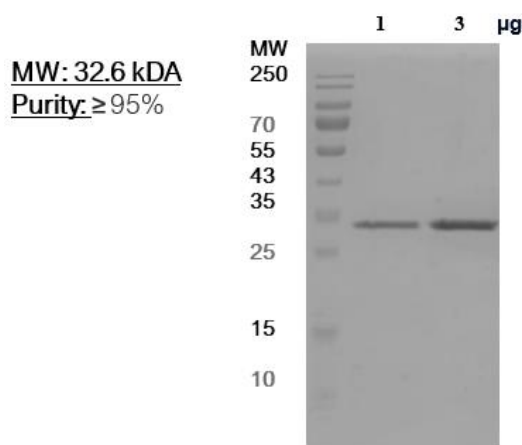


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## Specifications

enzymatic activity	$\geq 250$ U/ $\mu$ l <i>One unit of the enzyme cleaves approximately 37 <math>\mu</math>g of DNA, which corresponds to an <math>\Delta A_{260}</math> change of 1.0 after 30 minutes incubation at 37 °C under defined conditions: Assay buffer: 50 mM Tris-HCl, 1 mM MgCl<sub>2</sub>, 100 <math>\mu</math>g/ml BSA. Substrate: 1 mg/ml sonicated salmon sperm DNA with 100 <math>\mu</math>g/ml BSA. Absorbance A<sub>260</sub> and subsequent activity was determined after trichloroacetic acid precipitation of acid-soluble DNA fragments.</i>
purity	$\geq 95$ % <i>evaluated by SDS-PAGE Coomassie staining. Purified by combination of metaloafinite chromatography and ion-exchange chromatography.</i>
formulation	50 mM Tris-HCl, pH 8.0, 2 mM MgCl <sub>2</sub> , 20 mM NaCl
specificity	indiscriminately digests DNA and RNA of any origin

## 12.5% SDS-PAGE Coomassie staining



## Packaging and Storage

- 25,000 U in 0.1 ml
- 50,000 U in 0.2 ml
- liquid / frozen, storage at -20°C
- stability:  $\geq 6$  months, avoid repeated freeze-thaw cycles.

