

RPT0008LQ

Leader in Biomolecular Solutions for Life Science



Recombinant *Serratia marcescens* Nuclease

Catalog No.: RPT0008LQ

Recombinant

Sequence Information

Species Gene ID Swiss Prot

<I>Pichia</I>187005285 P13717
>

Tags

No tag

Synonyms

Endonuclease; Nuclease; nucA; nuc

Product Information

Source

Purification

> 95% by SDS-PAGE.

Endotoxin

<0.1EU/μg

Formulation

Solution in 50% glycerol containing 20 mM Tris HCl, pH 8.0, 2 mM MgCl₂, and 20 mM NaCl.

Reconstitution

Background

Catalyzes the hydrolysis of both DNA and RNA, double- or single-stranded, at the 3' position of the phosphodiester bond to produce 5'-phosphorylated mono-, di-, tri- and tetranucleotides. DNA is a slightly better substrate than RNA.

Basic Information

Description

Recombinant *Serratia marcescens* Nuclease Protein is produced by <I>Pichia</I> expression system. The target protein is expressed with sequence (Asp22-Asn266) of *serratia marcescens* Nuclease (Accession #WP_015377376.1) fused with no additional amino acid.

Bio-Activity

1. One unit (U) is defined as the amount of enzyme required to change the absorption value of A_{260} by 1.0 (equivalent to complete digestion of 37 μg of salmon essence DNA into oligonucleotides) in 30 min at 37°C, pH 8.0 reaction conditions. The specific activity of *Serratia marcescens* nuclease is > 1000 U/μL. 2. Recombinant *Serratia marcescens* Nuclease (0.1U) can effectively degrade 5 μg plasmid DNA at 37°C for 30 min. The reaction buffer is: 10 mM MgCl₂, 0.1 mg/mL BSA, 50 mM Tris-HCl, pH 8.5.

Storage

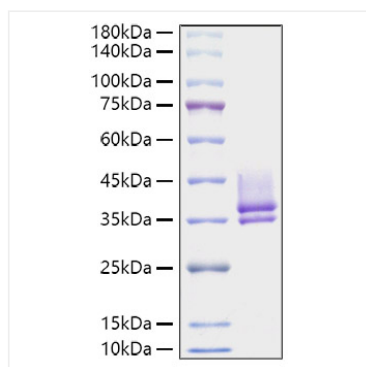
stable at -70°C. This product is stable at ≤ -20°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze/thaw cycles.

Contact

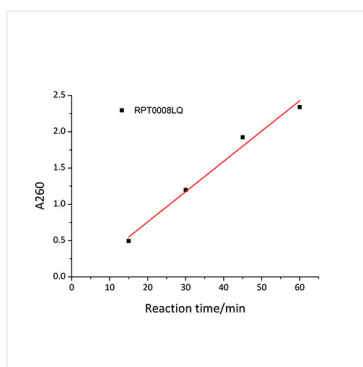


www.abclonal.com

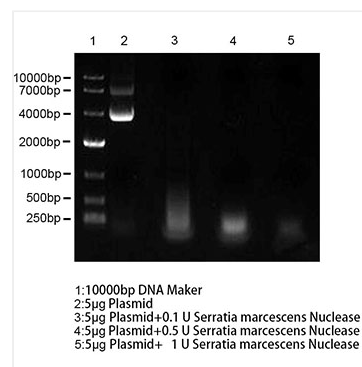
Validation Data



Recombinant *Serratia marcescens* Nuclease was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



One unit (U) is defined as the amount of enzyme required to change the absorption value of ΔA_{260} by 1.0 (equivalent to complete digestion of 37 μ g of salmon essence DNA into oligonucleotides) in 30 min at 37°C, pH 8.0 reaction conditions. The specific activity of *Serratia marcescens* nuclease is > 1000 U/ μ L.



Recombinant *Serratia marcescens* Nuclease (0.1U) can effectively degrade 5 μ g plasmid DNA at 37°C for 30 min. The reaction buffer is: 10 mM MgCl₂, 0.1 mg/mL BSA, 50 mM Tris-HCl, pH8.5.