

Code; RP-smNuc-S
Lot; xxxx
Size; 2,500 kunits



ProteinExpress

Serratia marcescens Nuclease, recombinant

Concentration : 2500 units/ μ L

Storage : Stored at -20°C to -80°C . Avoid repeated freeze-thaw cycles.

Description : *Serratia marcescens* Nuclease (AAA26560) 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. The sequence is same with Benzonase® (Benzonase is a trademark of Merck KGaA, Darmstadt, Germany).

N-terminal Sequence Analysis : DTLES

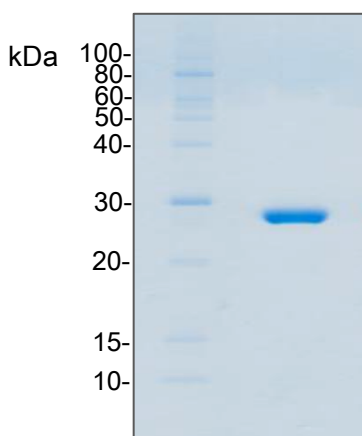
Storage Buffer :

20 mM Tris/HCl, pH 8.0
20 mM NaCl
2 mM MgCl_2
50% Glycerol

Source : Recombinant protein, expressed in *Brevibacillus choshinensis*.

Molecular Weight : 27kDa, under reduced condition (SDS-PAGE).

Purity : > 95%, as determined by SDS-PAGE visualized by CBB stain.



Unit Definition : One unit will digest sonicated salmon sperm DNA to acid-soluble oligonucleotides equivalent to a ΔAbs_{260} of 1.0 in 30 min at pH 8.0 at 37°C .

Reaction mixture for unit definition:

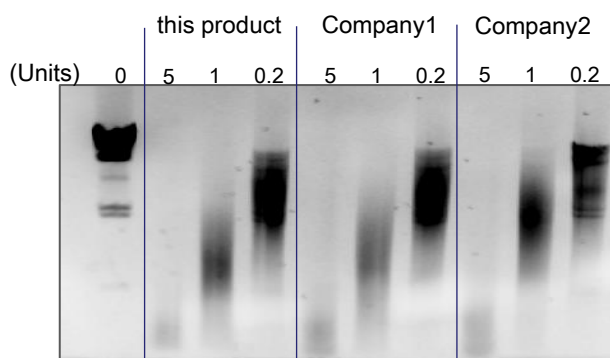
50 mM Tris-HCl, pH 8.0
1 mM MgCl_2
0.02% BSA
1mg/mL salmon sperm BSA, sonicated

Applications

- Viscosity reduction in *E. coli* lysates (in a typical example, 1-5 units are added per gram of *E. coli* pellet and incubate for 30min at 4°C)
- Removal of nucleic acid contaminants from sample solution

Reference:

- FEBS Lett. 1997 Jul 21;412(1):217-22.
- FEMS Microbiol Lett. 1998 Aug 1;165(1):1-13.
- Gene. 1987;57(2-3):183-92.
- J Biol Chem. 1946 Aug;164(2):563-8.
- J Biol Chem. 1969 Oct 10;244(19):5213-8.
- J Bacteriol. 1963 Feb;85(2):273-8.
- Nucleic Acids Res. 1992 Oct 11;20(19):4971-4.
- Protein Sci. 1996 Jan;5(1):24-33.



Analysis of SmNuclease activity by λ HindIII DNA cleavage assay.

For Research Use Only. Not for use in diagnostic procedures

ProteinExpress Co., Ltd.

2-1-6, Kazusakamatari, Kisarazu-shi, Chiba 292-0818, Japan
Tel: +81-438-52-0112, Fax: + 81-438-52-0113
E-mail; service@proteinexpress.co.jp
URL; <http://www.proteinexpress.co.jp>