Creative Enzymes®

Serratia marcescens nuclease (SMnuclease), Recombinant

Cat. No. EXWM-3708

Lot. No. (See product label)

Introduction

Description	SMnuclease is the only known nuclease that can hydrolyze all types of nucleic acids, including single-stranded, double-stranded, linear, and circular DNA or RNA. The DNA hydrolysis rate of SMnuclease is 34 times that of DNaseI, and 4 times that of Staphylococcus aureus nuclease. SMnuclease can react under a very wide range of conditions (such as 6 M Urea, 0.1 M Guanidine HCl, 0.4% Triton X-100, 0.1% SDS, 1 mM EDTA, 1 mM PMSF) and is widely used to remove nucleic acids from biological products.

Product Information

Species	Serratia marcescens
Form	Colorless clear liquid
EC Number	EC 3.1.30.2
CAS No.	9025-65-4
Molecular Weight	28.0 kDa
Purity	>90% by SDS-PAGE
Activity	≥ 1.5×10^6 U/mg
pH Stability	pH 6-10
Optimum pH	8
Optimum temperature	37°C
Unit Definition	The amount of enzyme that reduced the value of ΔA260 by 1.0 (equivalent to the complete digestion of 37 μg Salmon DNA) within 30 minutes under the reaction conditions of 37°C and pH 8.0 is defined as an active unit.
Reaction	Endonucleolytic cleavage to 5'-phosphomononucleotide and 5'-phosphooligonucleotide end-products
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	The product is stored at -20°C. The shelf life is 24 months. The product is stable under the condition of cold and airtight storage, and the activity is not significantly attenuated.