

## 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**  $\geq 1.5 \times 10^6$  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  $\Delta A_{260}$  by 1.0 (equivalent to the complete digestion of 37  $\mu$ g 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.