

## type I site-specific deoxyribonuclease

Cat. No. EXWM-3573

Lot. No. (See product label)

### Introduction

#### Description

This is a large group of enzymes which, together with those now listed as EC 3.1.21.4 (type II site-specific deoxyribonuclease) and EC 3.1.21.5 (type III site-specific deoxyribonuclease), were previously listed separately in sub-subclasses EC 3.1.23 and EC 3.1.24. They have an absolute requirement for ATP (or dATP) and S-adenosyl-L-methionine. They recognize specific short DNA sequences and cleave at sites remote from the recognition sequence. They are multifunctional proteins that also catalyse the reactions of EC 2.1.1.72 [site-specific DNA-methyltransferase (adenine-specific)] and EC 2.1.1.37

#### Synonyms

type I restriction enzyme; deoxyribonuclease (ATP- and S-adenosyl-L-methionine-dependent); restriction-modification system; deoxyribonuclease (adenosine triphosphate-hydrolyzing); adenosine triphosphate-dependent deoxyribonuclease; ATP-dependent DNase; type 1 site-specific deoxyribonuclease

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 3.1.21.3

#### CAS No.

37263-09-5

#### Reaction

Endonucleolytic cleavage of DNA to give random double-stranded fragments with terminal 5'-phosphates; ATP is simultaneously hydrolysed

#### 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

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.