

SpeI Restriction Enzyme

Cat. No. SREG-0001

Lot. No. (See product label)

Introduction

Description	SpeI Restriction Enzyme is a rapid recombinant endonuclease for sequence-specific cleavage of genomic DNA, plasmid DNA, and PCR products.
Applications	Rapid restriction digestion of genomic DNA, plasmid DNA, and PCR products.
Synonyms	SpeI; SpeI Restriction Endonuclease; SpeI Endonuclease

Product Information

Source	Genetically engineered recombinant restriction endonuclease
Specificity	Recognition sequence: 5'-A [^] CTAGT-3' / 3'-TGATC [^] A-5'; produces a 5'-CTAG cohesive end.
Function	Catalyzes sequence-specific cleavage of double-stranded DNA at SpeI recognition sites.
Substrates	Double-stranded genomic DNA, plasmid DNA, and PCR products containing a SpeI recognition site.
Reaction	5'-A [^] CTAGT-3' / 3'-TGATC [^] A-5' → DNA fragments with 5'-CTAG cohesive ends
Notes	Residual ethanol, chloroform, phenol, SDS, or EDTA in the DNA preparation may reduce digestion efficiency. Highly supercoiled DNA, genomic DNA, templates with multiple recognition sites, or sites close to DNA ends may require more enzyme or a longer incubation. Add the enzyme after the other reaction components.
Protocol	1. Prepare the DNA digestion mixture using the selected reaction buffer and DNA substrate. 2. Add SpeI Restriction Enzyme last, mix gently, and collect the liquid at the bottom of the tube. 3. Incubate for 5-15 minutes to complete sequence-specific DNA cleavage. 4. When the color reaction buffer is used, load the digestion product directly onto an agarose gel.
Advantages	Rapid 5-15 minute digestion; compatible with a universal buffer system; supports multi-enzyme digestion; color-buffer reactions can be loaded directly for gel electrophoresis.
Usage	For rapid restriction digestion in cloning, DNA analysis, and related molecular biology workflows.

Usage and Packaging

Package	50 reactions
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Storage and Shipping Information

Storage	Store at -30°C to -15°C.
Shipping Conditions	Ship at 0°C or below.