

Restriction  
Endonuclease



# Stu I

Recognition  
Sequence:

AGG↓CCT  
TCCT↑GGA

S

**E907**

500 units  
10,000 u/ml

Lot:

Exp:

Store at -20°C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	25-50	100	25-50	100	100	100

37°C

NO

Y

λ

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: *Streptomyces tubercidicus*.

Supplied in:

10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA,  
1 DTT, 200 µg/ml BSA, 50% glycerol.

Reaction Conditions:

1X SE-Buffer Y. Incubate at 37 °C.

1X SE-Buffer Y (pH 7.9 @ 25° C):

33 mM Tris-Ac    66 mM KAc  
10 mM MgAc    1 mM DTT

Heat Inactivation:

No (80 °C for 20 minutes).

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.

Quality Control Assays

Ligation: After 10-fold overdigestion with Stu I, 90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 20 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 10 units of restriction endonuclease for 3 hours.

Enzyme Properties:

When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Reagents Supplied with Enzyme:

10X SE Buffer Y.