

Restriction  
Endonuclease



# Pst I

Recognition  
Sequence:

CTGCA↓G  
G↑ACGTC

XS

**E927m**  
1,200 units  
20,000 u/ml

Lot:  
Exp:  
**Store at -20C**

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	0-10	50-75	25-50	100	100	100

**37°C** **NO** **Y**  $\lambda$  **RR** **BSA**

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: An *E.coli* strain that carries the cloned *Pst I* gene from *Providencia stuartii*.

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

Reaction Conditions:  
1X SE-Buffer Y, BSA (100 µg/ml). Incubate at 37° C.

1X SE-Buffer Y (pH 7.6 @ 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. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 µg/ml.

### Quality Control Assays

Ligation:After 20-fold overdigestion with Pst 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 40 Units of enzyme incubated for 3 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Do not use BSA for long incubation.

Oligonucleotide Assay:No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 20 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, BSA (10 mg/ml).