

Restriction
Endonuclease



PaI A I

Recognition
Sequence:

GG↓CGCGCC
CCGCGC↑GG

S

E483

100 units
500 u/ml

Lot:

Exp:

Store at -20°C

| SE-Buffers | B | G | O | W | Y | ROSE |
|------------|-------|-------|---|---|-----|------|
| %Activity | 25-50 | 10-25 | 0 | 0 | 100 | 40 |

37°C

65°C

Y

λ

For more details
scan the code



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CERTIFICATE OF ANALYSIS

Source: *Pseudomonas alcaligenes* Bs 17.

Supplied in:

10 mM Tris-HCl (pH 7.5), 100 mM KCl, 0.1 mM EDTA,
7 mM 2-mercaptoethanol, 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:

Enzyme is inactivated by incubation at 65°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 2-fold overdigestion with PaI A I, ~90%
of the DNA fragments can be ligated with T4 DNA Ligase
and 95% of these can be recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of
DNA and 1 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 0.5 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.

Blocked by CG methylation.