Restriction Endonuclease

SibEnzyme®

Pce I

Recognition Sequence:

AGG↓CCT
TCC↑GGA

S

E105T

1,000 units
20,000 u/ml

Lot: 35
Exp: 05/19
Store at -20C

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

50°C | 80°C | Y | λ | TURBO

For more details scan the code

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CERTIFICATE OF ANALYSIS

Description: Turbo Pce I can be used for short time (10-15 min) DNA digestion as well as for standard reaction. The reaction can be performed using optimal or universal (ROSE) Buffer. Buffer ROSE is perfect for double digestion.

Source: *Planococcus citreus*

Supplied in: 10 mM Tris-HCl (pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 100 µg/ml BSA, 50% glycerol.

Reaction Conditions:
1 x SE-Buffer Y or 1 x SE-Buffer ROSE.
Incubate at 50°C.

1 x SE-Buffer Y (pH 7.9@ 25°):
33 mM Tris-Ac 66 mM Kac
10 mM MgAc 1 mM DTT

Heat Inactivation: Enzyme is inactivated by incubation at 80°C for 20 minutes.

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

Quality Control Assays
Ligation: After 20-fold overdigestion with Pce I, 70% 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 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 20 units of restriction endonuclease for 3 hours.

Reagents Supplied with Enzyme:
10 x SE-Buffer Y, 10 x SE-Buffer ROSE.

Turbo DNA Digestion:
Applications:
-Fast DNA analysis
-Fast preparation of vectors for cloning
-Double digestion
Enzyme Properties:
1 µl of Turbo Pce I cuts 1 µg of DNA in 1 x SE-Buffer Y or universal 1 x SE-Buffer ROSE in 10-15 min (see the protocol below). Short time DNA digestion requires high quality purification of DNA sample. This enzyme can digest DNA at standard incubation time (1-16 hours) as well.

Turbo reaction protocol:
20 µl of the reaction volume:
Reaction Buffer (x10) - 2 µl
Plasmid DNA - 1-2 µl (up to 1 µg) or
PCR product - 5-10 µl (~0,2 µg)
Sterile water - up to 20 µl
+ 1 µl of Turbo Restriction Endonuclease
Incubate at 50°C for 10-15 min.