Restriction Endonuclease

Pvu II

For more details

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	2,000 units	
	10,000 u/ml	

SE-Buffers	В	G	0	w	Y	ROSE
%Activity	25-50	100	25-50	25-50	25-50	100

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SibEnzyme®

CAGLCTG

GTCTGAC

Store at -20C

RR

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BSA

Lot:

Exp:

CERTIFICATE OF ANALYSIS

<u>Source</u>: An E.coli strain that carries the cloned Pvu II gene from Proteus vulgaris.

Supplied in:

10 mM Tris-HCl (pH 7.5), 300 mM NaCl, 0.1 mM EDTA, 1 mM DTT, 100 μg/ml BSA, 50% glycerol.

Reaction Conditions:

1X SE-Buffer G, BSA (100 μg/ml). Incubate at 37° C.

 1X SE-Buffer G (pH 7.6 @ 25° C):

 10 mM Tris-HCl
 50 mM NaCl

 10 mM MgCl₂
 1 mM DTT

Heat Inactivation:

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

<u>Unit Definition</u>:One unit is defined as the amount of enzyme required to digest 1 μ g of Lambda DNA in 1 hour at 37° C in a total reaction volume of 50 μ l. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 μ g/ml.

Quality Control Assays

<u>Ligation</u>:After 10-fold overdigestion with Pvu II, more than 90% of the DNA fragments can be ligated and recut.

 $\underline{16-\text{Hour Incubation}}$:A 50 μl reaction containing 1 μg of DNA and 10 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Do not use BSA for long incubation. Conditions of high enzyme concentration may result in star activity.

<u>Oligonucleotide Assay</u>: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 G, BSA (10mg/ml).