Restriction Endonuclease

SibEnzyme®

Bpu10 I

Recognition Sequence:

CC↓TNAGC
GGANT↑CG

S

E149

200 units

5,000 u/ml

Lot:

Exp:

Store at -20C

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

37°C 80°C K λ RR

For more details scen the code

Ph/F+7(383)333-6853
info@sibenzyme.com
www.sibenzyme.com

CERTIFICATE OF ANALYSIS

Source: *An E.coli strain that carries recombinant plasmids.*

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

Reaction Conditions:
1X SE-Buffer K. Incubate at 37° C.

1X SE-Buffer K (pH 8.5 @ 25° C):
10 mM Tris-HCl 100 mM NaCl
10 mM $MgCl_2$ 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 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 Bpu10 I, 80% of the DNA fragments can be ligated. Of these 90% can be recut. In the presence of 10% PEG ligation is better.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 5 Units of enzyme incubated for 16 hours resulted In the same pattern of DNA bands as a reaction incubated for 1 hour.
High enzyme concentration may result in star activity or incomplete DNA cleavage. We recommend increasing incubation time instead of using an excess of Bpu10I.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 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 K.

The minimum number of units that resulted in complete digestion of 1 µg of substrate DNA in 16 hours is 0.5.