



BstV1 I

Recognition Sequence:

S E303 100 units 1.000 u/ml GCAGC(N) 8 LCGTCG(N) 12 T

Lot: Exp:

Store at -20°C

 SE-Buffers
 B
 G
 O
 W
 Y
 ROS

 %Activity
 75-100
 100
 75-100
 75-100
 75-100
 100

 55°C
 80°C
 G
 DBR322

For more details scen the code



CERTIFICATE OF ANALYSIS

Source: Bacillus stearothermophilus V1.

Supplied in:

 $\overline{10}$ mM Tris-HCl (pH 7.5), 200 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 100 µg/ml BSA, 50% glycerol.

Reaction Conditions:

1× SE-Buffer G. Incubate at 55° C.

<u>1X SE-Buffer G (pH 7.6 @ 25° C)</u>:

 $\begin{array}{ll} 10~\text{mM Tris-HCl} & 50~\text{mM NaCl} \\ 10~\text{mM MgCl}_2 & 1~\text{mM DTT} \end{array}$

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 pBR322 DNA in 1 hour at 55° C in a total reaction volume of 50 μ l.

Quality Control Assays

 $\underline{Ligation} : After \ 3-fold \ overdigestion \ with \ BstV1\ I, \ more \\ than \ 90\% \ of \ the \ DNA \ fragments \ can be \ ligated \ and \ recut.$

 $\underline{16\text{-Hour Incubation}}\text{:A 50}\ \mu\text{l}$ reaction containing 1 μg of DNA and 2 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 1 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.

At 37° C activity is 10% from maximum.