

CERTIFICATE OF ANALYSIS

Source: Escherichia coli ICR

Supplied in: 10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol,

Reaction Conditions:

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

1 x SE-Buffer G (pH 7.6@ 25°C): 10 mM Tris-HCl 50 mM NaCl 10 mM MaCl 1 mM DTT

50% glycerol.

20 minutes.

Heat Inactivation:

Enzyme is inactivated by incubation at 65°C for

1 hour at 37°C in a total reaction volume of 50 µl. To obtain 100% activity. BSA should be added to the 1 x reaction mix to a final concentration of 100 µg/ml.

Unit Definition: One unit is defined as the amount of

enzyme required to digest 1 μq of λ DNA/HindIII in

Quality Control Assays Ligation: After 5-fold overdigestion with EcoICR I,

>90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

reaction incubated for 1 hour. No using BSA for long incubation.

restriction endonuclease for 3 hours.

16-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 Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 5 units of

SE-Buffer, it may be necessary to add more enzyme to achieve complete digestion.

Enzyme Properties

Reagents Supplied with Enzyme: 10 x SE-Buffer G. BSA (10 mg/ml).

When using a buffer other than the optimal (supplied)