

Restriction  
Endonuclease



# Dra I

Recognition  
Sequence:

TTT↓AAA  
AAA↑TTT

S

**E055**

1,000 units  
20,000 u/ml

Lot:

Exp:

Store at -20°C

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

37°C

65°C

G

λ

BSA

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: *Deinococcus radiophilus*.

Supplied in:

10 mM Tris-HCl (pH 7.5), 250 mM NaCl, 0.1 mM EDTA,  
7 mM 2-mercaptoethanol, 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 MgCl<sub>2</sub>    1 mM DTT

Heat Inactivation:

Enzyme is inactivated by incubation at 65°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.  
To obtain 100% activity, BSA should be added to the  
1x reaction mix to a final concentration of 100 µg/ml.

Quality Control Assays

Ligation: After 20-fold overdigestion with Dra 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.

Do not use BSA for long incubation.

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.

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 (10 mg/ml).