Restriction Endonuclease

Nru I

Recognition

Sequence:

CERTIFICATE OF ANALYSIS

<u>Source</u>: Nocardia rubra.

<u>Supplied in:</u> 10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA, 1 mM DTT, 200 μg/ml BSA, 50% glycerol.

$\frac{Reaction\ Conditions:}{1X\ SE-Buffer\ Y,BSA\ (100\ \mu g/ml).\ Incubate\ at\ 37\ ^{\circ}C.}$

 1X SE-Buffer Y (pH 7.9 @ 25° C):

 33 mM Tris-Ac
 66 mM KCl

 10 mM MgAc
 1 mM DTT

Heat Inactivation:

Enzyme is not 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 µg of Lambda DNA (Dam-) in 1 hour at 37° C in a total reaction volume of 50 µl.

Quality Control Assays

<u>Ligation</u>:After 20-fold overdigestion with Nru I, ~50% of the DNA fragments can be ligated and recut. In the presence of 10% PEG ligation is better.

<u>16-Hour Incubation</u>: A 50 μ l reaction containing 1 μ g 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.

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

Blocked by overlapping Dam methylation (G $^{\rm m}{\rm ATC}$): TCGC<u>GATC</u>.

S E923 500 units 20,000 u/ml

0-10

G

10-25

SE-Buffers

%Activity

For more details

scen the code

AGC 1GCT Lot: Exp:

0

25-50

W

75-100

SibEnzyme®

TCGLCGA

Store at -20°C

Y

100

Dam

ROSE

100

BSA

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