MANUFACTURED BY EURx

roboklon

NarI

NarI
Restriction Endonuclease

Recognition Sequence:

5`-G G C G C C-3`
3`-C C G C G G-5`

Cat. No.	Size
E2291-01	200 units
E2291-02	1 000 units

Reaction Temperature: 37°C

Inactivation Temperature (20 min): 65°C

Prototype: NarI

Source: *Nocardia argentinensis*

Package Contents:
- NarI
- 10x Reaction Buffer ONE
- BSA (100x)
  Added as separate component to prevent reaction buffer precipitation.
- Dilution Buffer # NarI
  Added only for enzymes exceeding 10 U/µl in concentration. Use dilution buffer to dilute working stocks of enzyme to a customary concentration of 5 to 10 U/µl. Diluted enzyme stocks will not freeze during storage at -20°C.

Storage Conditions: Store at -20°C

Double Digestion – Buffer Compatibility:
ONE Buffer is compatible with most EURx restriction enzymes.

DNA Methylation:
No inhibition: dam, EcoKI
Potential inhibition: dcm
Inhibition (Blocked): CpG

Standard Reaction Protocol:

Mix the following reaction components:
1-2 µg pure DNA or 10 µl PCR product (=~0.1-2 µg DNA)
5 µl 10x Buffer ONE
0.5 µl BSA (100x)
1-2 U NarI (use 1 U / µg DNA, < 10 % React. Volume!)
Tips: Add enzyme as last component. Mix components well before adding enzyme. After enzyme addition, mix gently by pipetting. Do not vortex. High (excess) amounts of enzyme can greatly speed up the reaction.
@ 50 µl H_2O, DNA and DNase free

Incubate for 1 h at 37°C
To obtain complete digestion of high molecular weight DNA, (e.g. plant genomic DNA), add excess amounts of enzyme and prolong the incubation time.

Stop reaction by alternatively
(a) Addition of 2.1 µl EDTA pH 8.0 (0.5 M), final 20 mM or
(b) Heat Inactivation
20 min at 65°C or
(c) Spin Column DNA Purification
(e.g. EURx PCR/DNA CleanUp Kit, Cat.No. E3520) or
(d) Gel Electrophoresis and Single Band Excision
(e.g. EURx AgaroseOut DNA Kit, Cat.No. E3540) or
(e) Phenol-Chloroform Extraction or Ethanol Precipitation.

Note:

Some NarI sites are cut very slowly, for example on pBR322 the NarI site at 548 bp.

Unit Definition:

One unit is the amount of enzyme required to completely digest 1 µg of Ad-2 DNA in 1 hr in a total reaction volume of 50 µl. Enzyme activity was determined in the recommended reaction buffer.

Reaction Buffer:

1 x ONE Buffer
To be supplemented with 100 µg/ml bovine serum albumin.

Storage Buffer:

10 mM Tris-HCl (pH 7.5 at 25°C), 200 mM NaCl, 1 mM dithiothreitol, 0.1 mM EDTA, 200 µg/ml bovine serum albumin and 50 % (v/v) glycerol.

Quality Control:

All preparations are assayed for contaminating endonuclease, 3'-exonuclease, 5'-exonuclease/5'-phosphatase, as well as nonspecific single- and double-stranded DNase activities.