MANUFACTURED BY EURx

roboklon

TaqII

Taq II
Restriction Endonuclease

Recognition Sequence:

5`-G A C C G A (N)$_{11}$-3`
3`-C T G G C T (N)$_{9}$-5`

Cat. No.	Size
E2411-01	100 units
E2411-02	500 units

Reaction Temperature: 65°C

Inactivation Temperature (20 min): --

Prototype: TaqII

Source: *Thermus aquaticus*
Note 1: Purified from *E.coli* strain that carries the cloned taqRII gene from *Thermus aquaticus**.
* patent pending

Package Contents:
- TaqII
- 10x ONE Buffer
- Dilution Buffer: Taq II
  Added only for enzymes exceeding 10 U/µl in concentration. High ptotein concentration warrants optimal stability during prolonged storage. Use dilution buffer to dilute short term working stocks to a custom concentration of 5 to 10 U/µl. Diluted enzyme stocks will not freeze during storage at -20°C.

Storage Conditions: Store at -20°C

Recommended Buffer: ONE
(or compatible third party buffers)

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

DNA Methylation:
No inhibition: dam, dcm, EcoKI
Potential inhibition: 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 ONE Buffer
1 U TaqII (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.
@ 50 µl H_2O, DNA and DNase free

Incubate for 3 h at 65°C

Stop reaction by alternatively
(a) Addition of 1.2 µl EDTA pH 8.0 [0.5 M], final 20 mM or
(b) Heat Inactivation
20 min at 89°C (not recommended) 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

Note 1: **It is not recommended to use more than 1 unit of enzyme per 1 µg of DNA.**
Note 2: **Over 1 hr digestion is highly recommended. Best results are obtained with 3 hr digestion.**
Note 3: **PCR products must be purified prior to digestion. Attempts to digest non-purified PCR products result in extremely poor enzyme performance.**

Unit Definition:

One unit is the amount of enzyme required to digest 1 µg of pBR322 DNA to obtain stable digestion pattern 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

Storage Buffer:

20 mM Tris-HCl (pH 7.5 at 22°C), 0.1 mM EDTA, 200 mM NaCl, 1 mM dithiothreitol, 200 µg/ml bovine serum albumin, 0.02 % [v/v] Tergitol™ TMN, 0.02 % Tween™20, 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.