







R0639S



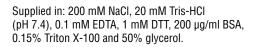
2.000 units 10.000 U/ml Lot: 0051208 RECOMBINANT Store at -20°C Exp: 8/14

Recognition Site:

5′...GTAC...3′ 3'...CAT,G...5'

Source: An E.coli strain that carries the cloned CviQI gene from *Chlorella* virus NC64A (NY-2A) (J.L.Van Etten).

New Diluent Buffer



Reagents Supplied with Enzyme: 10X NEBuffer 3, 100X BSA.

Reaction Conditions: 1X NEBuffer 3, supplemented with 100 µg/ml BSA. Incubate at 25°C.

1X NEBuffer 3: 100 mM NaCl 50 mM Tris-HCI 10 mM MgCl 1 mM dithiothreitol pH 7.9 @ 25°C

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 μa of λ DNA in 1 hour at 25°C in a total reaction volume of 50 µl.

Diluent Compatibility: Diluent Buffer C 250 mM NaCl, 10 mM Tris-HCl, 0.1 mM EDTA, 1 mM dithiothreitol, 0.15% Triton X-100, 200 µg/ml BSA and 50% glycerol (pH 7.4 @ 25°C).

Quality Control Assays

Ligation: After 5-fold overdigestion with CviQI. approximately 75% of the DNA fragments can be ligated with T4 DNA Ligase (at a 5' termini concentration of 1-2 µM) at 16°C. Of these ligated fragments. > 95% can be recut.

16-Hour Incubation: A 50 ul reaction containing 1 μ g of λ DNA and 20 units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour with 1 unit of enzyme.

Exonuclease Activity: Incubation of a 50 µl reaction containing 50 units of CviQI with 1 ug of a mixture of single and double-stranded [3H] E. coli DNA (105 cpm/ug) for 4 hours at RT released < 0.1% of the total radioactivity.

Enzyme Properties

Activity in NEBuffers:

NEBuffer 1 75% NEBuffer 2 100% NEBuffer 3 100% NEBuffer 4 75%

When using a buffer other than the optimal (supplied) NEBuffer, it may be necessary to add more enzyme to achieve complete digestion.

Survival in a Reaction: A minimum of 0.25 unit is required to digest 1 µg of substrate DNA in 16 hours.

Heat Inactivation: No

Notes: CviQI is an isoschizomer of Rsal.

CviQI exhibits only 10% activity at 37°C.

Not sensitive to dam, dcm or mammalian CpG methylation.

= Time-Saver™ Qualified (See www.neb.com for details).







CERTIFICATE OF ANALYSIS

CviQI





info@neb.com www.neb.com

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New Diluent Buffer

Supplied in: 200 mM NaCl, 20 mM Tris-HCl (pH 7.4), 0.1 mM EDTA, 1 mM DTT, 200 μg/ml BSA, 0.15% Triton X-100 and 50% glycerol.

Reagents Supplied with Enzyme:

10X NEBuffer 3, 100X BSA.

Reaction Conditions: 1X NEBuffer 3, supplemented with 100 µg/ml BSA. Incubate at 25°C.

1X NEBuffer 3:

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