



R0601S

 100 units
 2,000 U/ml
 Lot: 0051208

 RECOMBINANT
 Store at -20°C
 Exp: 8/14

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BioLabs.

1-800-632-7799

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www.neb.com

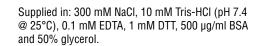
NEB 4 37° 🕍

Recognition Site:

5′... CC^VTCAGC ... 3′ 3′... GGAGT<u>C</u>G ... 5′

Source: An *E. coli* strain that carries the cloned Bbv CI gene from *Bacillus brevis* (L. Ge)

New Storage Conditions



Reagents Supplied with Enzyme: 10X NEBuffer 4.

Reaction Conditions: 1X NEBuffer 4. Incubate at 37°C.

1X NEBuffer 4:

50 mM potassium acetate 20 mM Tris-acetate 10 mM magnesium acetate 1 mM DTT pH 7.9 @ 25°C

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 μ g of λ DNA in 1 hour at 37°C in a total reaction volume of 50 μ l.

Diluent Compatibility: Diluent Buffer B

300 mM NaCl, 10 mM Tris-HCl, 0.1 mM EDTA, 1 mM DTT, 500 µg/ml BSA and 50% glycerol (pH 7.4 @ 25°C).

Quality Control Assays

Ligation: After 2-fold overdigestion with BbvCl, approximately 25% of the DNA fragments can be ligated with T4 DNA Ligase (at a 5' termini concentration of 1–2 μ M) at 16°C. Of these ligated fragments, > 95% can be recut.

16-Hour Incubation: A 50 μ I reaction containing 1 μ g of DNA and 5 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 20 units of enzyme with 1 μ g sonicated ³H DNA (10⁵ cpm/ μ g) for 4 hours at 37°C in 50 μ l reaction buffer released < 0.1% radioactivity.

Activity in NEBuffers:

NEBuffer 1 50% NEBuffer 2 100% NEBuffer 3 10% NEBuffer 4 **100%**

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: Suitable for an extended or overnight digestion. Enzyme is active > 8 hours.

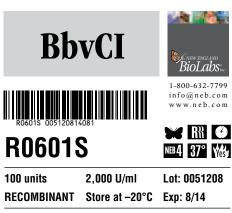
Heat Inactivation: 80°C for 20 minutes.

Note: Cleavage of mammalian genomic DNA is impaired by overlapping CpG methylation.

Conditions of low ionic strength, high enzyme concentration, gylcerol concentrations > 5% or pH > 8.0 may result in star activity.

Image: Saver[™] Qualified (See www.neb.com for details).

CERTIFICATE OF ANALYSIS



Recognition Site:

5′... CC^VTCAGC ... 3′ 3′... GGAGT_ACG ... 5′

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NEBuffer 2	100%
NEBuffer 3	10%
NEBuffer 4	100%
When using a	buffer oth

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■ Time-Saver[™] Qualified (See www.neb.com for details).