



R0606S

Lot: 0131211 500 units 10.000 U/ml RECOMBINANT Store at -20°C Exp: 11/14

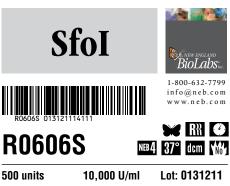
Recognition Site:

5′... GGC^{*}GCC...3′ 3′... CCGCGG...5′

Source: An E. coli strain that carries the cloned Sfol gene from *Serratia fonticola* (R. Camp)

Supplied in: 200 mM NaCl. 10 mM Tris-HCl (pH 7.4), 0.1 mM EDTA, 1 mM dithiothreitol, 200 µg/ml BSA and 50% glycerol.

New Storage Conditions



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New Storage Conditions

Reagents Supplied with Enzyme: 10X NEBuffer 4.

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

1X NEBuffer 4:

in 1975

BioLabs

1-800-632-7799

info@neb.com

www.neb.com

NEB 4 37° dcm VM4

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

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

Diluent Compatibility: Diluent Buffer B 300 mM NaCl, 10 mM Tris-HCl, 0.1 mM EDTA, 1 mM dithiothreitol, 500 µg/ml BSA and 50% glvcerol (pH 7.4 @ 25°C)

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erol (pH 7.4 @ 25°C)

pH 7.9 @ 25°

of 50 µl.

50 mM potassium acetate

10 mM magnesium acetate

Quality Control Assays

Ligation: After 10-fold overdigestion with Sfol. > 95% of the DNA fragments can be ligated with T4 DNA Ligase (at a 5' termini concentration of $1-2 \mu$ M) at 16°C. Of these ligated fragments, > 95% can be recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg 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 with 1 unit of enzyme.

Exonuclease Activity: Incubation of 80 units of enzyme with 1 µg sonicated [³H] DNA (10⁵ cpm/µg) for 4 hours at 37°C in 50 µl reaction buffer released < 0.1% radioactivity.

Endonuclease Activity: Incubation of 40 units of enzyme with 1 µg of LITMUS 28 plasmid DNA for 4 hours at 37°C in 50 µl reaction buffer resulted in < 20% conversion to RF II as determined by agarose gel electrophoresis.

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Enzyme Properties

Activity in NEBuffers: NEBuffer 1 25% NEBuffer 2 100%

NFBuffer 3 50% 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: A minimum of 1.0 unit is required to digest 1 µg of substrate DNA in 16 hours.

Heat Inactivation: No.

Note: Sfol is an isoschizomer of Ehel, Kasl and Narl.

Blocked by some combinations of overlapping *dcm* methylation. Cleavage of mammalian genomic DNA is blocked by CpG methylation.

Companion Products:

dam-/dcm- Competent E. coli #C2925H 20 transformation reactions #C2925 24 transformation reactions

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

CERTIFICATE OF ANALYSIS

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