NEBuffer Set 1,2,3,4 & BSA

1-800-632-7799
info@neb.com
www.neb.com

B7000S 001110314031

B7000S

1.5 ml of each NEBuffer (10X) Lot: 0011103

15.0 mg BSA (100X) Store at –20°C Exp: 3/14

Description: New England Biolabs provides a color-coded 10X NEBuffer with each restriction endonuclease to ensure optimal (100%) activity. Most of our enzymes are supplied with one of four standard NEBuffers. Occasionally, an enzyme has specific buffer requirements not met by one of the four standard NEBuffers, in which case the enzyme is supplied with its own unique NEBuffer. Some restriction endonucleases require BSA at a final concentration of 100 µg/ml for optimal activity. When required, BSA is supplied as a 10 mg/ml (100X) stock and should be added to the reaction mixture.

Restriction endonucleases that do not require BSA for optimal activity are not adversley affected if BSA is present in the reaction mixture.

NEBuffer Color Code:

NEBuffer 1	Yellow
NEBuffer 2	Blue
NEBuffer 3	Red
NEBuffer 4	Green

1X NEBuffer 1:
10 mM Bis Tris Propane-HCl
10 mM $MgCl_2$
1 mM DTT
pH 7.0 @ 25°C
Supplied as a10X concentrated stock

1X NEBuffer 2:
50 mM NaCl
10 mM Tris-HCl
10 mM $MgCl_2$
1 mM DTT
pH 7.9 @ 25°C
Supplied as a10X concentrated stock

1X NEBuffer 3:
100 mM NaCl
50 mM Tris-HCl
10 mM $MgCl_2$
1 mM DTT
pH 7.9 @ 25°C
Supplied as a 10X concentrated stock

1X NEBuffer 4:
50 mM potassium acetate
20 mM Tris-acetate
10 mM magnesium acetate
1 mM DTT
pH 7.9 @ 25°C
Supplied as a10X concentrated stock

Quality Control

16-Hour Incubation: A 50 µl reaction containing this reaction buffer at a 1X concentration and 1 µg of HaeIII digested ϕX174 RF I DNA incubated for 16 hours resulted in no detectable non-specific nuclease degradation.

Endonuclease Activity: Incubation of this reaction buffer at a 1X concentration with 1 µg ϕX174 RF I DNA for 4 hours at 37°C in 50 µl reactions resulted in less than 5% conversion to RF II.

CERTIFICATE OF ANALYSIS

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