

Product Information

Nde I from *Neisseria denitrificans*

Catalog Number **R5509**

Store at -20 °C

Product Summary

Recognition Sequence: 5'-CA/TATG-3'

Activity: 10,000 units/ml

Cutting: 100%

No degradation detected with >20 units for 16 hrs.

Fold over digestion: 320 (20 units x 16 hrs.)

Information for heat inactivation of Nde I is not available.

Reagent

Supplied as a solution in 20 mM Tris-HCl, pH 7.5, 0.1 mM EDTA, 100 mM NaCl, 1 mM dithioerythritol, 0.02% polydocanol, 0.01% gelatin, 50% glycerol (v/v) at 4 °C.

Unit Definition

One unit is the enzyme activity that completely cleaves 1 µg λ DNA in 1 hr. at 37 °C in a total volume of 25 µL of Restriction Endonuclease Buffer SH

Specificity

Nde I recognizes the sequence CA/TATG and generates fragments with 5'-cohesive ends.¹ Nde I generates compatible ends to Asn I, Mae I and Msc I. Nde I digestion of DNA is inhibited by methylation of N⁶ position of the internal adenine (CAT^mATG).²

Restriction Endonuclease Buffer SH, Catalog Number B3657, is supplied as a 10x concentrate.

1x Restriction Endonuclease Buffer SH

Composition for Nde I: 100 % Digestion at 37 °C.
50 mM Tris-HCl, pH 7.5, 100 mM NaCl, 10 mM MgCl₂, 1 mM dithioerythritol (DTE)

Quality Control Testing

Absence of unspecific endonuclease activities:

1 µg λ DNA is incubated for 16 hrs. in 50 µL Restriction Endonuclease Buffer SH with excess of Nde I.

References

1. Watson, R., et al., *FEBS Lett.*, **150**, 114 (1982).
2. Kessler, C., et al., *Gene*, **92**, 1 (1990).

TD,PHC 12/12-1