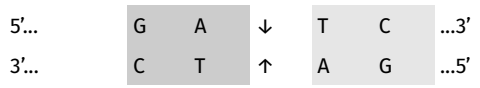
DATA SHEET

Jena Bioscience

DpnI

Neoschizomers: BfuCI, Bsp143I, BstENII, BstKTI,BstMBI, DpnII, Kzo9I, NdeII
JBSpeed Restriction Enzyme

Cat. No.	Amount
EN-160S	200 Units
EN-160L	5 x 200 Units



Unit Definition: One unit is the amount of enzyme required to completely digest 1 µg of pBR322 (22 sites) in 1 hour in a total reaction volume of 50 µl. Enzyme activity was determined in the recommended reaction buffer.

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Form: liquid (Supplied in 10 mM Tris-HCl pH 7.4, 400 mM KCl, 0.1 mM EDTA, 1 mM DTT, 200 µg/ml BSA and 50 % [v/v] glycerol)

Concentration: 10 units/µl

Source: *Diplococcus pneumoniae* G41, recombinant, *E. coli*

Supplied with: 10x Universal Buffer (UB)

Recommended 50 µl assay

5 µl	10x Universal Buffer (UB)
1 µg	pure DNA[1] or PCR product[2]
10 units	enzyme
fill up to 50 µl	PCR grade water

[1] Supercoiled or high molecular weight DNA (e.g. plant genomic DNA) may require longer incubation time or higher amount of enzyme.
[2] Some enzymes may require additional DNA bases flanking the restriction site for complete digestion.

Protocol:

- The enzyme should not exceed 10 % of total reaction volume.
- Add enzyme as last component. Mix components well before adding enzyme. After enzyme addition, mix gently by pipetting. Do not vortex.
- Incubate 5 to 10 min. at 37 °C.
- Stop reaction by alternatively:
  - Addition of 2.1 µl EDTA pH 8.0 [0.5 M], final 20 mM
  - Heat Inactivation (20 min. at 80 °C)
  - Spin Column DNA Purification (e.g. PCR Purification Kit, Cat.-No. PP-201S/L)
  - Gel Electrophoresis and Single Band Excision (e.g. Agarose Gel Extraction Kit, Cat.-No. PP-202S/L)
  - Phenol-Chloroform Extraction or Ethanol Precipitation.

Double Digestion - Buffer Compatibility:
B1 - 75-100 % Relative Activity
B2 - 75-100 % Relative Activity
B3 - 50-75 % Relative Activity
B4 - 10 % Relative Activity
B5 - 75-100 % Relative Activity
1x UB - 100 % Relative Activity (recommended)

Please note that the optimum digestion condition for this enzyme is 1x UB. Within the Universal Buffer (UB) system, the most majority of our enzymes display 100% Relative Activity in 1x UB and only few either in 0.5x or 2x UB. If optimum condition for second enzyme is different than the recommended for the first enzyme, we suggest carrying out first the restriction at the higher recommended concentration of UB and dilute the reaction volume to the adequate UB concentration for further proceeding with the second restriction.