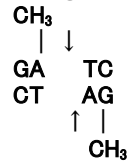


Recognition Sequence



Dpn I

Code No. **DPN-101**Lot No. *********Size **1,000 units**Source *Diplococcus pneumoniae G41*Concentration : ****** units/ μL Unit Definition : One unit is defined as the amount of enzyme required to completely digest 1 μg of pBR322 DNA in 1 hr at 37 °C in 50 μL of assay buffer.

Storage Buffer : 10 mM Tris-HCl(pH7.4)
 400 mM NaCl
 1 mM Dithiothreitol
 0.1 mM EDTA
 200 $\mu\text{g}/\text{mL}$ Bovine serum albumin
 50 % (V/V) Glycerol

Assay Buffer : 33 mM Tris-acetate (pH7.9)
 10 mM Magnesium acetate
 66 mM Potassium acetate
 1 mM Dithiothreitol

Reaction Buffer (Attached) TA Buffer (x10 Concentration)
 330 mM Tris-acetate (pH7.9)
 100 mM Magnesium acetate
 660 mM Potassium acetate
 5 mM Dithiothreitol

Overdigestion When 13 units of enzyme was incubated with 1 μg of λ DNA for 16 hrs at 37°C in 50 μL of assay buffer, a normal and sharp pattern was shown on an agarose gel electrophoresis.

Ligation and Recutting After digestion of pBR322 DNA by 8 units of enzyme for 4hrs at 37°C, 50% of the fragment was ligated with T4 DNA Ligase. 90% of the ligated DNA could be recut under the standard conditions.

- Note
- ① DpnI cleaves only when its recognition site is methylated.
DNA purified from a dam⁺ strain will be substrate for DpnI
 - ② Enzyme quantity cutting each DNA[1 μg]

λ -DNA	pBR322	pUC19	M13mp18	(U)
>20	1	5	>20	

