



Data Sheet

Dpn I 5' ...GA[▼]TC...3'
 3' ...CT[▲]AG...5'

Source: An *E. coli* strain that carries the *dpnIR* gene from *Diplococcus pneumoniae* G41

Cat.-No.	Size	Conc.
mi-E0160S	250 units	10 u/μl
mi-E0160L	1,250 units	10 u/μl

Buffer supplied: 10x *Dpn I* (BSA included!)

Substrate for unit definition: pBR322 (22 sites)

Reaction conditions:

66 mM potassium acetate, 33 mM Tris-acetate (pH 7.9),
10 mM magnesium acetate, 100 μg/ml BSA.

Incubate at **37°C**.

Storage buffer:

400 mM KCl, 10 mM Tris-HCl (pH 7.4), 0.1 mM EDTA, 1
mM dithiothreitol, 200 μg/ml BSA, and 50% glycerol.
Store at -20°C.

Ligation and recutting:

After 50-fold overdigestion with *Dpn I*, >70% of the DNA
fragments can be ligated and >95% of these can be recut.

Note:

Dpn I is specific for methylated and hemimethylated
DNA. Since DNA isolated from most *E. coli* strains is
dam methylated, it is susceptible to *Dpn I* digestion.
Hence, *Dpn I* is frequently used after a PCR reaction to
digest the methylated parental DNA template and select
for the newly synthesized DNA containing mutations.

Heat inactivation: 80°C for 20 minutes