Product Description (Product Numbers R5001, R2502, R5003 and R1004)

Supercoiled plasmid pBR322 DNA is produced by the large-scale alkaline-lysis method (Sambrook et al., 1989) from a high-copy number derivative of pBR322 (Boros et al., 1984) and is relaxed using chicken erythrocyte topoisomerase I (Trask and Muller, 1983).

It is shipped on dry ice at a concentration of 1mg/ml in TE. Store at 4°C. For in-vitro laboratory research use only.

**TE Storage Buffer**
- 10mM Tris-HCL (pH 7.5)
- 1mM EDTA

**Supercoiling Assay**
0.5 µg of relaxed pBR322 when incubated with 1 U of DNA gyrase in a reaction volume of 30 µl at 37°C for 30 minutes in Incubation Buffer, is completely converted to the supercoiled form.

**Quality Control**
Purity was determined spectroscopically using the ratio between the OD$_{260}$ and OD$_{280}$ readings.

Incubation under gyrase assay conditions at 37°C for 30 minutes did not result in any detectable conversion of the DNA to either open circular or linear forms when assessed by agarose gel electrophoresis.

**References**