

Relaxed pN01



Product Description (Product Numbers PNO1R5001, PNO1R2502, PNO1R5003 and PNO1R1004)

Supercoiled plasmid pN01 DNA (modified, triplex-forming derivative of pBR322) 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 -20°C.

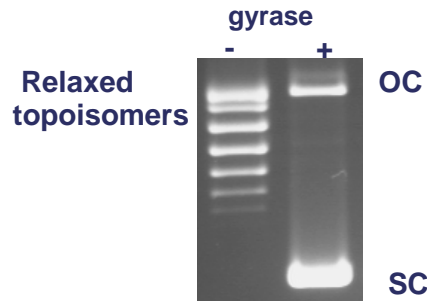
For *in vitro* laboratory research use only.

TE Storage Buffer

10 mM Tris.HCl (pH 7.5)
1 mM EDTA

Supercoiling Assay

0.5 µg of relaxed pN01 when incubated with 1 U of gyrase in a reaction volume of 30 µl at 37°C for 30 minutes in Assay Buffer, is completely converted to the supercoiled form.



Quality Control

Purity was determined spectroscopically using the ratio between the OD₂₆₀ and OD₂₈₀ 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

Boros, I., Pósfai, G. & Venetianer, P. (1984). High-copy –number derivatives of the plasmid cloning vector pBR322. *Gene* 30, 257-260

Sambrook, J., Fritsch, E.F. & Maniatis, T (1989). *Molecular cloning: a laboratory manual*. Cold Spring Harbor Press. Cold Spring Harbor.

Trask, D. K. & Muller, M. T. (1983) Biochemical characterization of topoisomerase I purified from avian erythrocytes. *Nucleic Acids Res.* 11, 2779-2800