ERRATUM

Bacillus subtilis Deoxyribonucleic Acid Gyrase

AKIO SUGINO AND KENNETH F. BOTT

Laboratory of Molecular Genetics, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709, and Department of Bacteriology and Curriculum on Genetics, University of North Carolina Medical School, Chapel Hill, North Carolina 27514

Volume 141, no. 3, p. 1333: The last paragraph in Materials and Methods should read as shown

"The dialysate was applied to a column (6 by 12 cm) of DEAE-Sephacell equilibrated with buffer A. The column was washed with 500 ml of buffer A containing 25 mM NaCl, and the activity was eluted with 2 liters of a 0.025 to 0.5 M NaCl linear gradient containing buffer A. DNA gyrase activity eluted at 0.25 to 0.3 M NaCl (Fig. 1A) and was concentrated by the addition of (NH₄)₂SO₄ to 75% saturation. The precipitate was suspended in 20 ml of 30 mM KPO₄ buffer (pH 6.8)-10 mM 2mercaptoethanol-10% glycerol (buffer B) and dialyzed against two 1-liter changes of buffer B for 6 h (fraction IV). Fraction IV was applied to a column (2 by 15 cm) of hydroxylapatite equilibrated with buffer B. The column was washed with 50 ml of buffer B. Enzyme activity was eluted with 500 ml of a 0.03 to 0.5 M KPO₄ buffer (pH 6.8) gradient containing 10% glycerol and 10 mM 2mercaptoethanol. DNA gyrase activity was eluted at 0.15 to 0.25 M KPO₄ (Fig. 1B). Active fractions were pooled, concentrated by dialysis against 30% (wt/vol) polyethyleneglycol 2000 containing buffer A, dialyzed against 50% glycerol-0.05 M Tris-hydrochloride (pH 7.5)-1 mM EDTA-10 mM 2-mercaptoethanol, and stored at -20°C (fraction V). Unless otherwise indicated, fraction V (specific activity, 7,500 U/mg of protein) was used. The breakage-rejoining activity in fraction V had a specific activity of 350 U/mg of protein. Difficulty in accurately estimating the activity of DNA gyrase in the crude extract prevented the inclusion of a purification table."

Page 1333, Fig. 1, right-hand ordinate: "OD₂₆₀" should read "OD₂₈₀."

Page 1333, Fig. 1 legend, line 9: "OD₂₆₀" should read "OD₂₈₀" and "260 nm" should read "280 nm."

Page 1336, column 1, line 1: "500 mM" should read "500 μ M."