72.5, 72.4, 71.5, 70.8 ($\underline{C}H_2Bn$), 69.6 (C5′$_{8'S}$), 69.5 (C5′$_{8'R}$), 47.5 (C2′$_{8'R}$), 45.5 (C2′$_{8'S}$), 29.4 (C8′$_{8'S}$), 26.0 (C6′$_{8'R}$), 25.6 (C7′$_{8'R}$), 24.6 (C8′$_{8'R}$), 23.4 (C7′$_{8'S}$), 22.9 (C6′$_{8'S}$), 18.3 (8′*S*-$CH_3$), 17.9 (8′*R*-$CH_3$), 10.8 (thymine-$\underline{C}H_3$). MALDI-TOF *m/z:* $[C_{28}H_{32}N_2O_5+Na]^+$ found 499.221, calcd 499.221.

**(1*R*,3*R*,4*R*,5*R*,8*S*)-1-(4,4′-Dimethoxytrityloxymethyl)-8-hydroxyl-5-methyl-3-(thymin-1-yl)-2-oxa-bicyclo[3.2.1]octane and (1*R*,3*R*,4*R*,5*S*,8*S*)-1-(4,4′-Dimethoxytrityloxymethyl)-8-hydroxyl-5-methyl-3-(thymin-1-yl)-2-oxa-bicyclo[3.2.1]octane (29).** To a solution of **28** (43 mg, 0.09 mmol) in dry methanol (2 mL) was added 20% $Pd(OH)_2/C$ (90 mg) and ammonium formate (117 mg, 1.8 mmol). The mixture was refluxed for 4 h, then filtered through a pad of Celite and the organic solvent was evaporated to dryness. The residue was coevaperated with dry pyridine twice and dissolved in the same solvent (2 mL). 4,4′-Dimethoxytrityl chloride (96 mg, 0.27 mmol) was added and the resulting mixture was stirred overnight at room temperature. After the solvent was removed, the residue was diluted with $CH_2Cl_2$, washed with saturated $NaHCO_3$. The organic layer was dried over $MgSO_4$, evaporated and the residue was applied to column chromatography on silica gel (0.5-1 % methanol in $CH_2Cl_2$ containing 1% pyridine, v/v) to give **29** (43 mg, 80 % in two steps) as inseparable diastereomers. $^1$H NMR (500 MHz, $CDCl_3$): δ 8.41 (2.2H, broad, H3), 7.91 (1H, s, H6$_{8'S}$), 7.86 (1.5H, s, H6$_{8'R}$), 7.46-6.86 (32.5H, m, aromatic), 5.80 (1H, s, H1′$_{8'R}$), 5.69 (1.5H, s, H1′$_{8'S}$), 4.51 (1.5H, d, $J_{2',3'}$ = 4.5 Hz, H3′$_{8'S}$), 4.47 (1H, d, $J_{2',3'}$ = 5.0 Hz, H3′$_{8'R}$), 3.81 (15H, s, 2×OC$\underline{H}_3$), 3.41 (1H, d, $J_{gem}$ = 10.5 Hz, H5′$_{8'R}$), 3.40 (1.5H, d, $J_{gem}$ = 11.0 Hz, H5′$_{8'S}$), 3.29 (1H, d, $J_{gem}$ = 10.5 Hz, H5″$_{8'R}$), 3.27 (1.5H, d, $J_{gem}$ = 11.0 Hz, H5″$_{8'S}$), 2.47 (1.5H, app t, $J_{2',3'}$ = 4.5 Hz, $J_{2',8'}$ = 2.5 Hz, H2′$_{8'S}$), 2.31 (1H, d, $J_{2',3'}$ = 5.0 Hz, H2′$_{8'R}$), 2.29 (2.5H, m, H8′), 1.97 (3H, m, H7′$_{8'S}$ and H6′$_{8'S}$), 1.79 (1H, m, H6′$_{8'R}$), 1.67 (1H, m, H7′$_{8'R}$), 1.47 (1.5H, m, H7″$_{8'S}$), 1.41 (4H, s, 8′*R*-thymine-C$\underline{H}_3$ and H7″$_{8'R}$), 1.39 (4.5H, s, 8′*S*-thymine-C$\underline{H}_3$), 1.36 (1H, m, H6″$_{8'R}$), 1.29 (6H, m, $J_{CH3,\ 8'}$= 7.5 Hz, H6″$_{8'S}$ and 8′*S*-C$\underline{H}_3$), 1.15 (3H, d, $J_{CH3,\ 8'}$= 7.0 Hz, 8′*R*-C$\underline{H}_3$). $^{13}$C NMR (125 MHz, $CDCl_3$): δ 162.9 (C4), 157.7 (C$_{ispo}$-OMe), 149.0 (C2$_{8'S}$), 148.8 (C2$_{8'R}$), 143.3, 134.9, 134.8 (DMTr), 134.4, 134.3 (C6), 129.1-124.3, 112.6, 112.3 (aromatic), 108.5, 108.3 (C5), 88.2 (C1′$_{8'S}$), 85.8 (DMTr-C$_{8'R}$), 85.6 (C4′$_{8'S}$), 84.2 (C1′$_{8'R}$ and C4′$_{8'R}$), 83.8 (C4′$_{8'S}$), 68.3 (C3′$_{8'R}$), 63.6 (C5′$_{8'R}$), 63.5