at room temperature. The reaction was neutralized with 1N HCl solution at 0°C and extracted with DCM twice. The combined organic layers were dried over MgSO4 and concentrated. The residue was chromatographed on silica gel (15-21% acetone in cyclohexane, v/v) to obtain **34** (411 mg, 91.5 %) as white foam. ^{1}H NMR (500 MHz, $CDCl_3$): δ 8.52 (1H, bs, H3), 7.91 (1H, d, $J_{6,\,CH3}$ = 1.0 Hz, H6), 7.35-7.25 (10H, m, aromatic), 6.06 (1H, s, H1′), 4.75 (1H, d, J_{gem} = 11.5 Hz, C$\underline{H}_2$Bn), 4.57 (1H, d, J_{gem} = 11.5 Hz, C$\underline{H}_2$Bn), 4.53 (1H, d, J_{gem} = 11.5 Hz, C$\underline{H}_2$Bn), 4.51 (1H, d, J_{gem} = 11.5 Hz, C$\underline{H}_2$Bn), 4.32 (1H, d, $J_{2',\,3'}$ = 3.0 Hz, H2′), 4.02 (2H, dd, J = 2.5 Hz and 7.0Hz, H7′ and H7″), 3.93 (1H, d, $J_{2',\,3'}$ = 3.0 Hz, H3′), 3.76 (1H, d, J_{gem} = 11.0 Hz, H5′), 3.60 (1H, d, J_{gem} = 11.0 Hz, H5″), 2.28 (1H, m, H6′), 1.40 (3H, d, $J_{6,\,CH3}$ = 1.0 Hz, thymine-C$\underline{H}_3$), 1.35 (1H, d, J = 12.5 Hz, H6″). ^{13}C NMR (125 MHz, $CDCl_3$): δ 163.8 (C4), 149.9 (C2), 137.4, 137.2 (C_{ipso}-Bn), 135.6 (C6), 129.1-127.7 (aromatic), 110.0 (C5), 85.9 (C1′), 83.9 (C4′), 75.8 (C2′), 73.6, 71.8 (C$\underline{H}_2$Bn), 71.4 (C3′), 69.9 (C5′), 60.7 (C7′), 27.8 (C6′), 11.9 (thymine-CH_3).

5′-*O*-(4,4′-Dimethoxytrityl)-2'-*O*,4'-*C*-ethylene-thymidine (36).

To a solution of **34** (208 mg, 0.448 mmol) in dry methanol (20 mL) was added 20% $Pd(OH)_2$/C (224 mg) and ammounicum formate (565 mg, 8.95 mmol) and reflux for 2.5h. The suspension was filtered through a pad of Celite and filtrate was evaporated. The residue was co-evaporated twice with dry pyridine and dissolved in the same (6 mL). 4, 4′-Dimethoxytrityl chloride (321 mg, 0.948 mmol) was added and stirred overnight at room temperature. The solvent was removed. The residue was chromatographed on silica gel (0-0.3 % methanol in CH_2Cl_2 containing 1% pyridine, v/v) to obtain **36** (163 mg, 62.1 % in tow steps) as white foam. ^{1}H NMR (500 MHz, DMSO-d_6): δ 11.39 (1H, s, H3), 7.68 (1H, s, H6), 7.43-6.90 (13H, m, aromatic), 5.89 (1H, s, H1′), 5.58 (1H, d, $J_{3',\,OH}$ = 5.5 Hz, 3′-OH), 4.12 (1H, dd, $J_{3',\,OH}$ = 5.5 Hz, $J_{2',\,3'}$ = 3.0 Hz, H3′), 4.06 (1H, d, $J_{2',\,3'}$ = 3.0 Hz, H2′), 3.81 (2H, m, H7′ and H7″), 3.74 (6H, s, 2xOC$\underline{H}_3$), 3.20 (1H, d, J_{gem} = 11.0 Hz, H5′), 3.17 (1H, d, J_{gem} = 11.0 Hz, H5″), 1.96 (1H, m, H6′), 1.34 (1H, m, H7″), 1.17 (3H, s, thymine-C$\underline{H}_3$).