

Supplemental Table 4. Incorporation^a of Individual Nucleotides on Unfolded and G-quadruplex-forming Substrates.

		3xGGG (unfolded)				4xGGG (G-quadruplex)			
		dATP	dTTP	dGTP	dCTP ^b	dATP	dTTP	dGTP	dCTP ^b
Pol η	34 nt	71.8	57.4	70.0	14.3	91.0	92.9	94.5	44.9
	35 nt	28.2	42.6	30.0	3.4	9.0	7.1	5.5	25.7
Pol κ	34 nt	82.6	41.3	71.4	17.3	97.3	99.2	95.6	65.5
	35 nt	17.4	58.7	28.6	6.1	6.6	4.4	8.5	14.0
Pol μ	34 nt	99.9	98.2	98.6	19.7	92.3	96.4	99.6	40.5
	35 nt	N.D.	N.D.	N.D.	5.0	7.7	3.6	N.D.	16.9
Pol β	34 nt	99.9	100	99.3	9.7	99.0	98.0	-----	21.2
	35 nt	N.D.	N.D.	N.D.	3.0	N.D.	N.D.	-----	21.1

^aValues, expressed as percentages of the total products present in individual reactions, were derived from Figure 6. N.D. = below minimum detection limit.

^bSubstantial production of longer (36-39 nt) products was observed using dCTP (see Supplemental Table 5).