Table 1. Inhibition of DNA polymerases, DNA polymerase fragments, and DNA polymerase chimeras by salts.

Protein	NaCl						KCl						KGlu					
	K_i	±	S.E.	a	±	S.E.	K_i	±	S.E.	a	±	S.E.	K_i	±	S.E.	a	±	S.E.
	mM						mM						mM					
TopoTaq	241.3	±	14	7.04	±	1.4	291.1	±	10	6.45	±	0.6	1403.0	±	20	6.03	±	0.4
TaqTopoC1	228.4	±	6	4.27	±	0.2	231.2	±	12	5.02	±	0.6	1730.0	±	125	2.45	±	0.6
TaqTopoC2	238.4	±	3	6.77	±	0.2	251.0	±	6	8.97	±	0.6	1164.5	±	42	4.34	±	0.5
TaqTopoC3	69.0	±	14	1.86	±	0.2	187.7	±	2	3.87	±	0.1	295.8	±	92	1.21	±	0.2
***Taq* polymerase**	138.7	±	6	3.24	±	0.5	161.0	±	6	3.50	±	0.2	610.1	±	51	4.45	±	0.3
Stoffel Fragment	38.6	±	3	3.45	±	0.2	45.8	±	4	2.92	±	0.1	59.6	±	38	1.47	±	0.4
KlenTaq	40.0	±	5	1.83	±	0.1	32.7	±	7	1.49	±	0.2	71.0	±	24	0.89	±	0.1
***Pfu* polymerase**	51.5	±	1	2.39	±	0.1	42.6	±	1	3.65	±	0.1	42.8*	±	6	3.24*	±	0.2
PfuC2	159.6	±	33	3.62	±	0.8	176.8	±	3	4.68	±	0.1	424.8*	±	9	5.76*	±	0.2

To take into account the activation of *Pfu* polymerase and the PfuC2 hybrid by KGlu, the experimental values of initial polymerization rates were analyzed by nonlinear regression using the following function:

$$\mathbf{v} = \frac{\mathbf{v}_0 \bullet (1 + b \cdot [Salt]^{\gamma})}{1 + \left(\frac{[Salt]}{K_i} \right)^{a}}$$

where **v** and $\mathbf{v}_0$ are initial primer extension rates with and without salt, respectively; K_i is an apparent inhibition constant, α is a parameter of cooperativity, β and γ are parameters of activation. Because $\gamma \cong 2$, it is likely that two ions of Glu^- bind to the *Pfu* polymerase catalytic domain without inhibiting the polymerase activity.