Table 5. Comparison of the kinetic parameters obtained for residues of Groups 1, 2, and 3 as defined in Tables 1 and 2

		12°C		17°C		22°C		27°C	
Group	χ^2/N	k_a, s^{-1}	k_b, s^{-1}	k_a, s^{-1}	k_b, s^{-1}	k_a, s^{-1}	k_b, s^{-1}	k_a, s^{-1}	k_b, s^{-1}
1	0.6	–	–	5.8 ± 0.2	788 ± 53	10.0 ± 0.3	1,274 ± 55	16.3 ± 0.8	1,958 ± 84
2	0.9	21.9 ± 0.3	128 ± 7	35.6 ± 0.5	209 ± 8	60 ± 1	351 ± 8	94 ± 3	558 ± 9
3	1.0	79 ± 3	384 ± 7	108 ± 4	605 ± 7	150 ± 6	978 ± 10	201 ± 9	1,502 ± 24

Relaxation dispersion data were fit directly to a model where k_a and k_b were constrained according to the relation $k_{a/b} = \frac{k_B T}{h} \exp\left(-\Delta G^{+}_{a/b} / RT\right)$. Chemical-shift differences were assumed to be temperature independent. Note that in Tables 1 and 2, parameters were obtained from fits where rates were not constrained to a specific functional form and where temperature-independent $\Delta\varpi$ values were assumed.