

Table 3. Kinetics of Operator Binding for Wild-Type and Mutant Repressors

	$t_{1/2}$ (sec)	k_{-2} (sec) ⁻¹	k_2 (sec) ⁻¹ M ⁻¹
Wild type	34	0.022	2.8×10^7
Lys ³⁴	163	0.0043	3.3×10^9
Asn ⁴⁸	52	0.013	5.0×10^7
Ser ⁴⁸	139	0.005	1.5×10^8
Lys ⁶³	250	0.0028	2.8×10^8

The $t_{1/2}$ values for dissociation of repressor-operator complexes are for standard assay conditions at 22°C (see Experimental Procedures, Figure 3). k_2 , the association rate constant, was calculated from the experimental dissociation rate constant (k_{-2}) and the equilibrium binding constant given in Table 2.