Table 3. Impact of differences in cleavage rate constants between the minor and major subpopulations on the average cleavage rate constant

Variant	**ρ**	$k_{\text{cleav,I}}$	$k_{\text{cleav,II-IV}}$	**Res. sq.**	f_1	k_{cleav}
	10	0.02	0.19	0.0030	0.62	0.09
	6	*0.03*	*0.17*	*0.0026*	*0.62*	*0.08*
WT	3	0.05	0.16	0.0028	0.62	0.09
	1	0.15	0.15	0.0035	0.62	0.15
	0.33	0.45	0.15	0.0039	0.62	0.33
	15	0.05	0.76	0.0033	0.62	0.32
	10	*0.07*	*0.67*	*0.0025*	*0.62*	*0.30*
dC12	3	0.19	0.57	0.0065	0.62	0.34
	1	0.56	0.56	0.0102	0.62	0.56
	0.33	1.72	0.57	0.0186	0.62	1.28
	10	0.03	0.29	0.0150	0.64	0.12
	5	*0.04*	*0.19*	*0.0035*	*0.64*	*0.09*
dA38	3	0.05	0.14	0.0012	0.64	0.08
	1	0.08	0.08	0.0305	0.64	0.08
	0.33	0.13	0.04	0.1133	0.64	0.10
	10	0.01	0.12	0.0008	0.64	0.05
	8	*0.01*	*0.11*	*0.0003*	*0.64*	*0.05*
C39S3	3	0.02	0.06	0.0149	0.64	0.04
	1	0.04	0.04	0.0620	0.64	0.04
	0.33	0.14	0.05	0.1153	0.64	0.11
	10	0.002	0.019	0.0062	0.48	0.011
	4	*0.003*	*0.012*	*0.0029*	*0.48*	*0.007*
RzAS3	3	0.003	0.010	0.0031	0.48	0.007
	1	0.006	0.006	0.0103	0.48	0.006
	0.33	0.015	0.005	0.0248	0.48	0.010
	10	0.002	0.024	0.0056	0.53	0.012

Variant	**ρ**	$\boldsymbol{k}_{\mathbf{cleav,I}}$	$\boldsymbol{k}_{\mathbf{cleav,II\text{-}IV}}$	**Res. sq.**	$\boldsymbol{f}_{\mathbf{1}}$	$\boldsymbol{k}_{\mathbf{cleav}}$
	6	*0.003*	*0.017*	*0.0045*	*0.53*	*0.010*
RzAS3/C39S3	3	0.004	0.011	0.0083	0.53	0.007
	1	0.006	0.006	0.0338	0.53	0.006
	0.33	0.012	0.004	0.0964	0.53	0.008

The rate of cleavage (k_{cleav}) was derived from an analytical fit to the experimental data as described above, while keeping the ratio $\rho = k_{\text{cleav,II-IV}}/k_{\text{cleav,I}}$ of the cleavage rate constants of the minor ($k_{\text{cleav,II-IV}}$) to that of the major sub-populations ($k_{\text{cleav,I}}$) constant at the tabulated value. Res. sq. indicates the sum of the squared residuals between fit and data. The average rate of cleavage was calculated as $k_{\text{cleav,ave}} = f_1 \times k_{\text{cleav,I}} + (1$ [minus] $f_1) \times k_{\text{cleav,II-IV}}$. The values for the optimal ρ (resulting in the lowest Res. sq.) are in italics.