

Supporting material

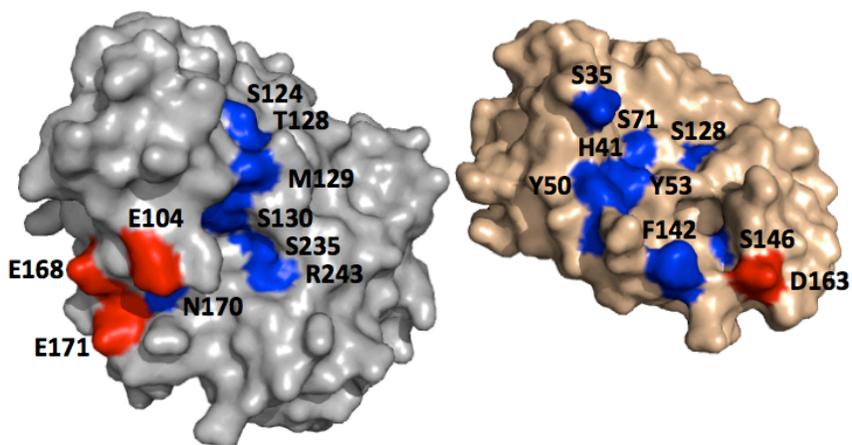
Contrasting factors on the kinetic path to protein complex formation diminish the effects of crowding agents

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Figure S1



Open-book representation of the TEM1 (left) - BLIP (right) complex. Residues that were involved in interactions with non-significant $\Delta\Delta G_{\text{int}}^{\ddagger}$ values are colored blue. TEM1 E104, E168, E171 and BLIP D163 that were involved in interactions with significant $\Delta\Delta G_{\text{int}}^{\ddagger}$ value are colored red.

Table S1

$\Delta\Delta G_{\text{int}}^{\ddagger}$ in dextran and distances
between residues in the final complex

Ala mutants				Fast mutants			
TEM1	BLIP	Distance (Å)	$\Delta\Delta G_{\text{int}}^{\ddagger}$ (kJ/mol)	TEM1	BLIP	Distance (Å)	$\Delta\Delta G_{\text{int}}^{\ddagger}$ (kJ/mol)
R243A	S71A	21.45	-0.06	E171K	K163D	5.66	-7.60
R243A	Y50A	6.45	0.94	E168K	K163D	4.37	-7.07
R243A	S35A	18.39	1.15	K171E	F142A	6.72	-0.52
R243A	H41A	15.23	-0.51	K168E	F142A	6.82	0.77
R243A	S146A	19.93	1.31	K171E	Y50A	14.38	0.31
R243A	S128A	25.88	-0.98	K168E	Y50A	14.68	-0.29
S235A	S71A	21.47	-0.80	K171E	S71A	24.10	-0.50
S235A	Y50A	6.97	0.98	K168E	S71A	20.83	1.09
S235A	H41A	14.46	-0.06	K171E	S35A	25.14	-1.18
S235A	S146A	20.46	0.10	K168E	S35A	22.61	-0.04
S235A	Y53A	14.55	0.76	K171E	S146A	11.86	-1.73
S235A	S128A	25.53	-1.29	K168E	S146A	8.56	-0.49
S235A	S35A	15.18	-0.33	K171E	S128A	23.24	-0.48
S235A	F142A	9.32	-1.64	K168E	S128A	17.30	0.37
E104A	S71A	11.97	0.22	K171E	Y53A	18.52	-0.34
E104A	H41A	11.50	1.50	K168E	Y53A	15.93	-0.61
T128A	S71A	17.77	0.39	K171E	H41A	22.36	-0.83
T128A	Y50A	5.89	1.57	K168E	H41A	20.24	-1.78
T128A	S35A	5.15	-0.28	S124A	K163D	23.94	-0.12
T128A	H41A	9.83	0.94	M129A	K163D	18.77	0.03
T128A	S128A	22.45	-1.38	E104A	K163D	7.10	-3.20
T128A	Y53A	11.81	0.60	S235A	K163D	19.09	-0.27
T128A	F142A	13.73	-1.76	T128A	K163D	22.87	-0.55
S124A	S71A	18.30	0.47	R243A	K163D	17.61	1.53
S124A	Y50A	9.78	1.60				
S124A	H41A	12.21	0.64				
S124A	S35A	4.81	-0.34				
S124A	S146A	23.03	1.44				
S124A	S128A	21.79	-1.03				
S124A	Y53A	13.84	0.12				
S124A	F142A	16.17	-0.61				
R243A	Y53A	14.60	0.12				
R243A	F142A	8.37	-0.61				
S130A	Y50A	5.31	0.69				
S130A	H41A	10.22	0.42				
S130A	Y53A	8.87	0.94				
S130A	F142A	7.74	-1.25				
N170A	F142A	3.40	-1.24				
N170A	Y50A	10.14	1.29				
N170A	S146A	11.77	0.78				
M129A	Y50A	3.36	0.49				
M129A	Y53A	7.66	-1.50				
M129A	S35A	5.00	-1.35				
M129A	S71A	12.41	-1.25				