

Supplementary Material**Table S1 Stabilizing mutations of chain DgokerA (Uniprot ID: H8GWN3)**

Substitutions	$\Delta\Delta G_{\text{pred}}$	C_{pred}
D171.A{I}	-2.033	0.804
N260.A{V}	-2.001	0.818
N260.A{I}	-1.997	0.812
N260.A{L}	-1.991	0.799
D171.A{V}	-1.969	0.812
N260.A{M}	-1.928	0.824
D171.A{C}	-1.922	0.831
N260.A{C}	-1.811	0.838
N260.A{F}	-1.809	0.826
N260.A{Y}	-1.722	0.828
G101.A{L}	-1.699	0.825
D171.A{W}	-1.676	0.785
T311.A{I}	-1.662	0.83
D171.A{F}	-1.659	0.824
G101.A{Y}	-1.634	0.813
T311.A{V}	-1.616	0.819
D171.A{Y}	-1.606	0.825
G101.A{I}	-1.605	0.842
T311.A{L}	-1.579	0.842
G188.A{L}	-1.555	0.821
G101.A{F}	-1.526	0.852
E100.A{Y}	-1.522	0.775
G101.A{V}	-1.509	0.83
D171.A{M}	-1.501	0.85
G101.A{M}	-1.497	0.843
S223.A{Y}	-1.493	0.818
Q125.A{F}	-1.473	0.831
G101.A{W}	-1.461	0.836
P336.A{F}	-1.438	0.844
G188.A{M}	-1.431	0.835
Q125.A{I}	-1.42	0.868
E100.A{F}	-1.405	0.827
D171.A{A}	-1.404	0.869
S223.A{W}	-1.401	0.818
P336.A{W}	-1.396	0.818
N260.A{W}	-1.385	0.842
E100.A{C}	-1.383	0.89
G188.A{I}	-1.383	0.831
Q125.A{V}	-1.381	0.883
Q125.A{W}	-1.38	0.841

G101.A{C}	-1.368	0.836
A259.A{I}	-1.365	0.81
E100.A{I}	-1.36	0.875
E100.A{W}	-1.357	0.776
Q125.A{C}	-1.351	0.874
Q125.A{Y}	-1.351	0.85
Q125.A{L}	-1.349	0.867
E100.A{L}	-1.349	0.878
P336.A{Y}	-1.341	0.815
S223.A{F}	-1.328	0.842
A259.A{L}	-1.315	0.826
T315.A{F}	-1.312	0.828
A104.A{W}	-1.311	0.844
N326.A{I}	-1.302	0.857
S223.A{L}	-1.301	0.881
T311.A{F}	-1.3	0.856
G188.A{Y}	-1.291	0.854
N326.A{F}	-1.289	0.846
E100.A{V}	-1.283	0.891
S223.A{M}	-1.281	0.842
T315.A{I}	-1.278	0.852
S338.A{Y}	-1.275	0.821
S325.A{F}	-1.273	0.816
S223.A{I}	-1.27	0.879
Q57.A{W}	-1.269	0.854
S325.A{W}	-1.264	0.85
T315.A{Y}	-1.263	0.845
A259.A{F}	-1.262	0.84
T315.A{C}	-1.258	0.86
G188.A{F}	-1.249	0.873
S342.A{W}	-1.238	0.85
G217.A{M}	-1.238	0.877
T189.A{W}	-1.235	0.836
S223.A{V}	-1.229	0.888
S262.A{M}	-1.229	0.866
P336.A{V}	-1.221	0.864
K228.A{W}	-1.218	0.854
T191.A{Y}	-1.216	0.818
N326.A{M}	-1.21	0.85
S338.A{C}	-1.209	0.868
E100.A{M}	-1.205	0.85
A108.A{E}	-1.201	0.867
E124.A{I}	-1.2	0.865
K228.A{Y}	-1.198	0.867
T315.A{M}	-1.197	0.827

S342.A{F}	-1.194	0.832
N260.A{A}	-1.192	0.883
S223.A{C}	-1.188	0.876
P336.A{C}	-1.187	0.871
N326.A{C}	-1.184	0.882
A103.A{W}	-1.183	0.859
S338.A{W}	-1.181	0.832
P336.A{I}	-1.181	0.879
K228.A{C}	-1.18	0.839
P336.A{L}	-1.177	0.871
T315.A{V}	-1.176	0.863
T315.A{L}	-1.174	0.854
N260.A{T}	-1.169	0.882
K228.A{F}	-1.167	0.866