

Table S1. Related to Figure 4. Sup35 and Rnq1 mutations isolated from genetic screen and their activities

Sup35 mutations	Frequency out of 24 seqs.	Heritable [<i>PSI</i>+] curing?	Increase sensor solubility during overexpression?
Q15-R, K139-I, Q242-R	4	Yes	Yes
Q18-R, Y32-H	2	Some (1-10%)	Yes
Q61-L	2	Yes	Yes
Q10-R, Q24-R, D500-V	2	Some (1-10%)	Yes
Q10-P, N229-D, H613-R	1	Some (1-10%)	Yes
N8-D, Q70-R, A237-T	1	Yes	Yes
N8-I, V246-A	1	Some (1-10%)	Yes
S17-R, Q56-R	1	Yes	Yes
Q15-R, P65-S	1	Yes	Yes
Y46-C, Q95-L	1	Yes	Yes
Q15-R, I152-T, I675-M	1	Yes	Yes
S17-R, L521-Q, L569-V	1	Yes	Yes
Q22-R	1	Yes	Yes
Q15-R	1	Yes	Yes
G20-D, N321-S	1	Some (1-10%)	Yes
Q15-R, N437-Y	1	Yes	Yes
G25-D	1	Some (1-10%)	Yes
Q10-R	1	Yes	Yes

Rnq1 mutations	Frequency out of 24 seqs.	Heritable [<i>RNQ</i>+] curing?	Increase sensor solubility during overexpression?
L91-P	6	No	No
L138-P, stop 313	5	Yes	Yes
V100-G, A69-T	4	No	Yes
L97-F, R112-G, G149-S	4	No	Yes
F214-L, Δ288-298	2	Yes	Yes
S8-P, Y256-C	1	No	Yes
S241-G	1	No	No
S12-P, S241-G	1	No	No

During selection, these mutants were expressed from endogenous promoters. Solubilizing activity may exist at that level of expression.