

Supplemental Table 2: Overview of the segregation analysis on kanamycin and hygromycin of T2 seeds, collected from primary transformants (T1) selected on kanamycin (upper part) and hygromycin (lower part) respectively, of the 35S control lines. In order to surely obtain primary transformants containing the 35S construct we selected on kanamycin. As mentioned in the main text the transformation efficiency on hygromycin was much lower due to the nature of the 35S promoter. However it is interesting to see that we were able to pick up some primary transformants on hygromycin. Although only four such transformants have been analyzed, it is remarkable that in none of these lines the *hpt* gene was efficiently removed. Although the number of transformants analyzed is rather small it is reasonably fair to say that by using the 35S promoter in our experiment not only the transformation efficiency was substantially lowered but that the ones we picked up are in majority poor lines for subsequent removal of the marker.

T2 seeds from T1 plants selected on kanamycin	Selection on Kanamycin				Selection on Hygromycin		
	R	S	$K_{R/S}^1$	χ^2 P-value (fits ratio)	R	S	$H_{R/S}^2$
35S-3-1	185	11	16,8	0.71 (15:1)	0	281	0
35S-3-2	151	55	2.75	0.57 (3:1)	0	307	0
35S-4-1	105	32	3.28	0.65 (3:1)	194	68	2.85
35S-4-2	98	30	3.27	0.68 (3:1)	216	79	2.73
35S-7-5	94	31	3.03	0.96 (3:1)	3	257	0.01
35S-9-4	99	34	2.9	0.88 (3:1)	78	166	0.47
35S-9-6	91	34	2.68	0.57 (3:1)	7	261	0.027

T2 seeds from T1 plants selected on hygromycin	Selection on Kanamycin				Selection on Hygromycin		
	R	S	$K_{R/S}$ ¹	χ^2 P-value (fits ratio)	R	S	$H_{R/S}$ ²
35S-1-H1	69	24	2.88	0.86 (3:1)	97	73	1.33
35S-2-H2	69	18	3.8	0.35 (3:1)	50	19	2.63
35S-3-H1	64	18	3.55	0.50 (3:1)	137	39	3.51
35S-6-H1	66	21	3.14	0.85 (3:1)	37	51	0.73

¹ $K_{R/S}$: ratio resistant to sensitive plants on kanamycin.

² $H_{R/S}$: ratio resistant to sensitive plants on hygromycin.