

Supplementary Table 2

	Theoretical number of potential DZFs in each library	Actual number of transformants for each library	Theoretical number of combinations tested in each library x library selection	Actual number of combinations tested in each library x library selection
Set/Group A: Ik, Eo, Pe, Hd, Hl, Hh	30	10^3-10^4	900	$\sim 10^6$
Set/Group B: Pe, Hd, Hl	6	10^4-10^5	36	$\sim 5 \times 10^6$
Set/Group C: Eo, Tr, Hl, Hh, Hc	20	10^3-10^4	400	$\sim 10^6$