

Supplementary Material

Table S1. *p*-values of the analysis of variance (ANOVA) performed using Tukey's pairwise test, among the different groups defined on the basis of the donor DNA used for transformation. Significant *p*-values are highlighted in grey.

	<i>hisF2</i>	<i>hisF3</i>	<i>hisF4</i>
<i>hisF</i>	0.0003394	0.0001713	0.0001628
<i>hisF2</i>		0.957	0.9473
<i>hisF3</i>			1

Table S2. *p*-values of the analysis of variance (ANOVA) performed using Tukey's pairwise test, among the different groups defined on the basis of the different molecular rearrangement (group A: 1 *hisF* copy; group B: 2 or more *hisF* copies; group C: chromosomal revertants). Significant *p*-values are highlighted in grey.

	B	C
A	1,05E-08	0.005725
B		8,36E-10

Table S3. Transformation efficiency calculated for all the genes/gene fragments used in this study. Average number of transformants was calculated subtracting the number of chromosomal revertants (group C) from the number of obtained His⁺ colonies.

Name	Donor DNA		Average n. of transformants	Transformation efficiency (n. of transformants/μg of DNA)
	Length (bp)	Quantity (ng)		
<i>hisF</i>	777	250	55.8	2.2×10^2
<i>hisF2</i>	609	200	5.7	2.9×10^1
<i>hisF3</i>	408	130	0.3	2.3×10^0
<i>hisF4</i>	217	70	0.3	4.3×10^0
<i>hisIE</i>	869	280	26	9.3×10^1