

## Supporting information

Table S3: Plasmids used in this study

Plasmids	Genotype	Source
pBHpC8	Source of the <i>cat</i> cassette	(S7)
pILL 600	Source of the <i>aphA3'-III</i> cassette	(S8)
pUC18	Amp <sup>r</sup> , Col×101, MCS within <i>lacZ</i> : blue/white selection	(S9)
pSUS1707	Amp <sup>r</sup> , pUC18 derivative containing <i>mutS2</i>	This study
pSUS1711	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS1707 derivative with a <i>mutS2::aphA3'-III</i> disruption	This study
pSUS2500	Amp <sup>r</sup> , pUC18 derivative containing <i>mutY</i>	(S6)
pSUS2501	Amp <sup>r</sup> , pUC18 derivative containing <i>comB10</i>	This study
pSUS2502	Amp <sup>r</sup> , pUC18 derivative containing <i>recJ</i>	This study
pSUS2503	Amp <sup>r</sup> , pUC18 derivative containing <i>recA</i>	This study
pSUS2508	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2500 derivative with a <i>mutY::aphA3-III</i> disruption	(S6)
pSUS2509	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2501 derivative with a <i>comB10::aphA3'-III</i> disruption	This study
pSUS2510	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2502 derivative with a <i>recJ::aphA3'-III</i> disruption	This study
pSUS2511	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2503 derivative with a <i>recA::aphA3'-III</i> disruption	This study
pSUS2518	Amp <sup>r</sup> , pUC18 derivative containing <i>xth</i>	This study
pSUS2520	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2518 derivative with a <i>xth::aphA3'-III</i> disruption	This study
pSUS2524	Amp <sup>r</sup> , pUC18 derivative containing <i>xseA</i>	This study
pSUS2525	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2524 derivative with a <i>xseA::cat</i> disruption	This study
pSUS2526	Amp <sup>r</sup> , pUC18 derivative containing <i>recR</i>	This study
pSUS2527	Amp <sup>r</sup> , pUC18 derivative containing <i>recN</i>	This study
pSUS2528	Amp <sup>r</sup> , pUC18 derivative containing <i>recG</i>	This study
pSUS2529	Amp <sup>r</sup> , pUC18 derivative containing <i>recB</i> homologue	This study
pSUS2530	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2526 derivative with a <i>recR::cat</i> disruption	This study
pSUS2532	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2527 derivative with a <i>recN::cat</i> disruption	This study
pSUS2534	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2528 derivative with a <i>recG::cat</i> disruption	This study

pSUS2535	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2529 derivative with a <i>recB::cat</i> disruption	This study
pSUS2537	Amp <sup>r</sup> , pUC18 derivative containing <i>nth</i>	This study
pSUS2538	Amp <sup>r</sup> , pUC18 derivative containing <i>ung</i>	This study
pSUS2540	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2537 derivative with a <i>nth::cat</i> disruption	This study
pSUS2541	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2538 derivative with a <i>ung::cat</i> disruption	This study
pSUS2600	Amp <sup>r</sup> , pUC18 derivative containing <i>magIII</i>	This study
pSUS2602	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2600 derivative with a <i>magIII::aphA3'-III</i> disruption	This study
pSUS2604	Amp <sup>r</sup> , pUC18 derivative containing <i>nucT</i>	This study
pSUS2606	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2604 derivative with a <i>nucT::aphA3'-III</i> disruption	This study
pSUS2613	Amp <sup>r</sup> , pUC18 derivative containing <i>mfd</i>	This study
pSUS2615	Amp <sup>r</sup> , Cm <sup>r</sup> , pSUS2613 derivative with a <i>mfd::cat</i> disruption	This study
pSUS2616	Amp <sup>r</sup> , pUC18 derivative containing <i>ruvA</i>	This study
pSUS2618	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2616 derivative with a <i>ruvA::aphA3'-III</i> disruption	This study
pSUS2619	Amp <sup>r</sup> , pUC18 derivative containing <i>ruvB</i>	This study
pSUS2621	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2619 derivative with a <i>ruvB::aphA3'-III</i> disruption	This study
pSUS2622	Amp <sup>r</sup> , pUC18 derivative containing <i>ruvC</i>	This study
pSUS2624	Amp <sup>r</sup> , Km <sup>r</sup> , pSUS2622 derivative with a <i>ruvC::aphA3'-III</i> disruption	This study
pADC-HpMutY	Amp <sup>r</sup> , Cm <sup>r</sup> , <i>ureAB</i> fragment in pUC18 with <i>H. pylori mutY</i> and <i>cat</i> cassette	(S10)