



**Figure S1 | Circos plots for the three replicates of targeted acquisition in the Lens (pLPL) CRISPR-Cas system.** Bacterial transformants with targeted plasmids were passaged for 20 generations without antibiotic selection to enrich for spacer acquisition; the leader-end of the CRISPR array was amplified and the amplicons were Illumina sequenced. Newly targeted protospacers were obtained from the raw reads using an in-house bioinformatics pipeline and were visualized with Circos. The height of the bars on the plot indicate the number of spacers mapped to the position on the plasmid, up to a 5% of total acquired spacers. The priming protospacer is denoted by the coloured box in the Circos plot.