

**Supplementary Figure S1.** An illustration of a pairwise genome comparison Circos plot. This plot shows the reference and query genomes arranged in a circle—the right semi-circle is the reference genome, whereas the left semi-circle is the query genome. Bands represent contigs or chromosome. Links connect similar regions between two genomes. The green track is the alignment histogram; each 10kbp window in the diagram is represented by a histogram bar and the height of each bar illustrates the total number of bases of the opposite genome aligned to this 10kbp window region. The upper border of the grey area delineates 10kbp height. If the height is higher than the 10kbp, it may indicate non-specific alignment or windows containing repetitive regions. A trough may indicate an unmapped region that could be an insertion (e.g. prophage insertion).