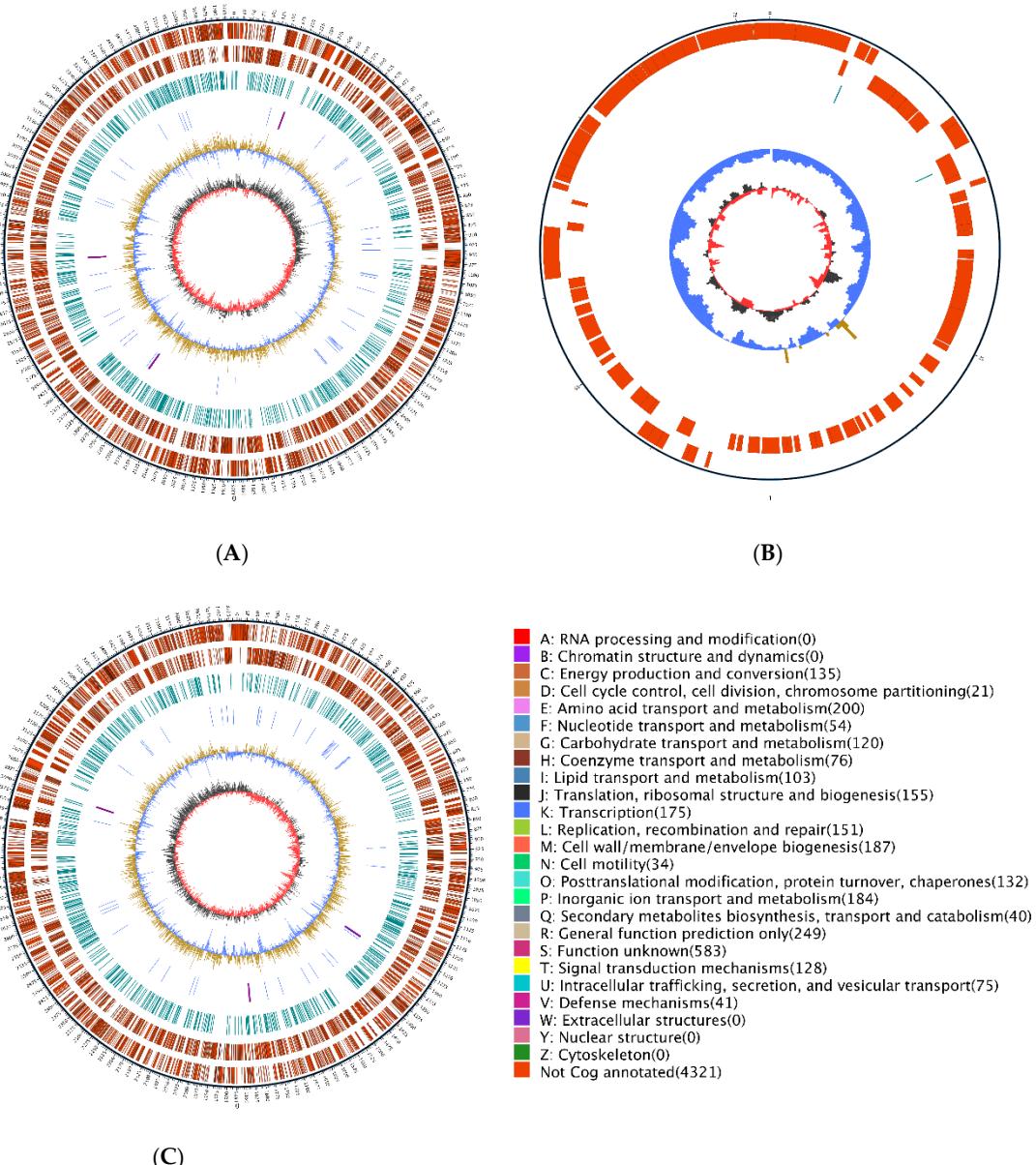


## Supplementary data



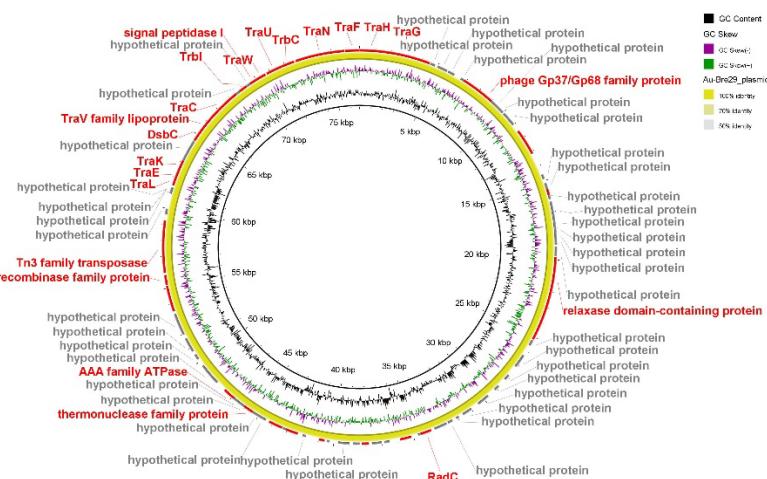
**Figure S1.** Circular map of the complete genome of *B. nasdae* Au-Bre29 and Au-Bre30. **(A)** Chromosome of Au-Bre29, **(B)** Plasmid of Au-Bre29 and **(C)** Chromosome of Au-Bre30. Circles from the outwards to inwards, ring 1: genome size (Kb); ring 2 and 3: genes existing on the Forward strand and Reverse strand, with different color indicate genes with different COG function; ring 4: repetitive sequence; ring 5: tRNA(blue) and rRNA(purple); ring 6: GC-content, with blue indicating the region with GC-content higher than average, light yellow indicate the region with GC-content lower than average; ring 7: GC-skew.

**Table S1.** General genomic feature of *B. nasdae* Au-Bre29 and Au-Bre30

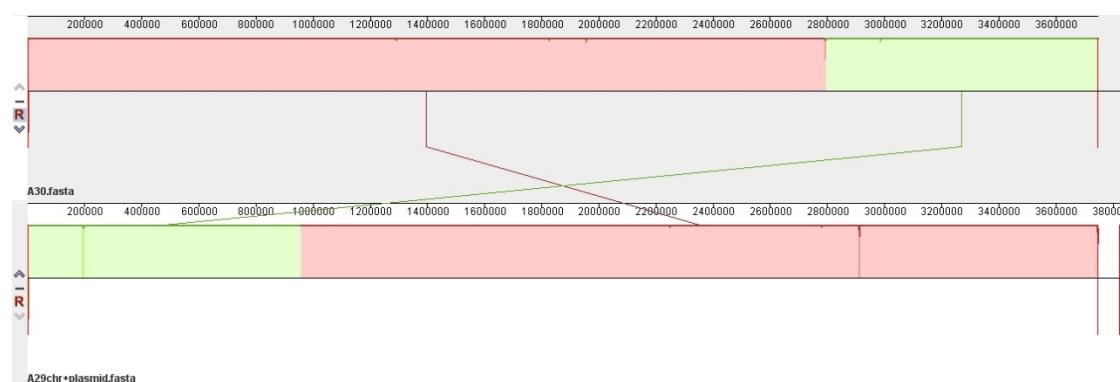
<b>Genomic contents</b>	<b><i>B. nasdae</i> Au-Bre29</b>	<b><i>B. nasdae</i> Au-Bre30</b>
<b>Bio Project Number</b>	PRJNA744386	PRJNA744387
<b>NCBI Accession</b>	NZ_CP080034.1	NZ_CP080036.1
	NZ_CP080035.1	
<b>Chromosome</b>	1 (3.747438 Mb)	1 (3.746705 Mb)
<b>Plasmid</b>	1 (0.076784 Mb)	0
<b>G+C content (%)</b>	65.69%	65.8%
<b>Genome size (Mp)</b>	3.8251164	3.746705
<b>Total CDS</b>	3665	3577
<b>Total tRNAs</b>	53	53
<b>Total Genes</b>	3731	3643
<b>Protein coding genes</b>	3618	3531
<b>Genes with function prediction</b>	3531	3474
<b>Genes assigned to KEGGs</b>	1772	1751
<b>Genes with signal peptides</b>	531	523
<b>Genes assigned to VFDB (Virulence)</b>	670	668
<b>Clustered gene</b>	8	9
<b>Gene encoding transport protein</b>	888	882
<b>Gene encoding secreted protein</b>	531	523
<b>Genes assigned to CARD (Antibiotic)</b>	8	6
<b>Genes assigned to TCDB (Transport)</b>	888	875

protein)

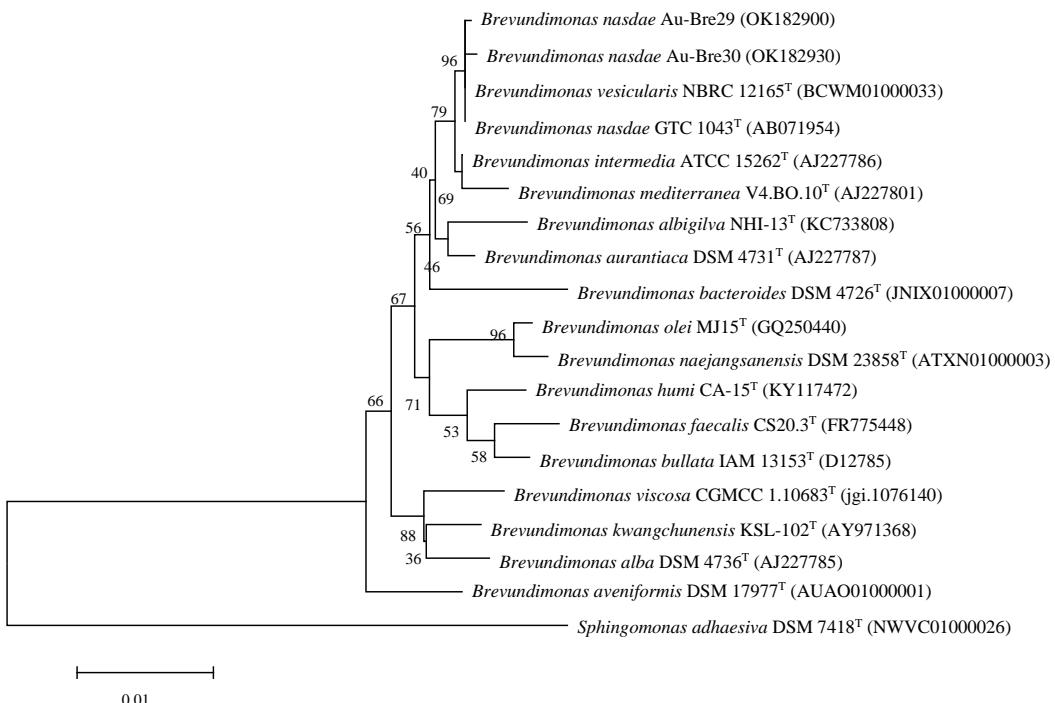
<b>Genes assigned to CAZy (EPS)</b>	139	138
<b>CRISPR</b>	3	2
<b>GIs</b>	9	9
<b>Prophage</b>	5	4
<b>Phage</b>	3(1/3 intact)	3(1/3 intact)



**Figure S2.** Plasmid circular map of *B. nasdae* Au-Bre29. Generated by BLAST Ring Image Generator (BRIG), shows the products of genes and their locations.



**Figure S3.** Comparison between the complete genomes of *B. nasdae* Au-Bre29 and Au-Bre30 by Mauve. Regard Au-Bre30 as reference genome (the top one).



**Figure S4.** Neighbor-joining phylogenetic tree constructed based on the 16S rRNA gene sequences. Showing the phylogenetic relationships between strains *Brevundimonas nasdae* Au-Bre29 and Au-Bre30 and other species in the genus *Brevundimonas*. Values indicate percentages of identical branching in 1000 bootstrap replications. The sequence of *Sphingomonas adhaesiva* DSM 7418<sup>T</sup> was used as an out-group. Bar, 0.01 substitutions per nucleotide position.