

**Table S1.** Comparative genomic features of strains IMCC43871<sup>T</sup>, IMCC45206<sup>T</sup>, *Rubrivirga marina* SAORIC-28<sup>T</sup>, and *Rubrivirga profundii* SAORIC-476<sup>T</sup>

Strains: 1, IMCC43871<sup>T</sup>; 2, IMCC45206<sup>T</sup>; 3, *R. marina* SAORIC-28<sup>T</sup>; 4, *R. profundii* SAORIC-476<sup>T</sup>

	1	2	3	4
<b>Genomic stats</b>				
GenBank Accession number	CP177355	CP177357	MQWD00000000*	MVOI00000000*
Size (bp)	4,173,969	4,167,368	4,981,075	4,601,673
Number of contigs	2	1	11	41
G + C content (%)	71.8	72.8	72.5	71.5
Number of tRNA	58	54	56	49
Number of rRNA	3	3	3	3
Protein coding sequence	3,620	3,593	4,254	3,892
<b>Genome validation (based on CheckM)</b>				
Completeness	98.4	98.4	97.3	98.4
Contamination	1.9	1.9	2.5	2.5

\* Genomes of *R. marina* SAORIC-28<sup>T</sup> and *R. profundii* SAORIC-476<sup>T</sup> were downloaded from NCBI

GenBank database and annotated in this study for comparative genomic analysis.