

**Table S2.** List of accession numbers for genomes used in phylogenetic analyses

Strain	GenBank Accession No.
<i>Alteromonas macleodii</i> ATCC 27126 <sup>r</sup>	GCF_000172635.2
<i>Pseudoalteromonas agarivorans</i> DSM 14585T	GCF_002310855.1
<i>Pseudoalteromonas aliena</i> SW19T	GCF_014905615.1
<i>Pseudoalteromonas amylolytica</i> JW1T	GCF_001854605.1
<i>Pseudoalteromonas arabiensis</i> JCM 17292T	GCF_001550155.1
<i>Pseudoalteromonas arctica</i> A 37-1-2T	GCF_000238395.3
<i>Pseudoalteromonas aurantia</i> 208T	GCF_014858725.1
<i>Pseudoalteromonas byunsanensis</i> JCM 12483T	GCF_001854475.1
<i>Pseudoalteromonas caenipelagi</i> JBTF-M23T	GCF_013140855.1
<i>Pseudoalteromonas carrageenovora</i> ATCC 43555T	GCF_900239935.1
<i>Pseudoalteromonas carrageenovora</i> IAM 12662T	GCF_014925295.1
<i>Pseudoalteromonas carrageenovora</i> NBRC 12985T	GCF_006539245.1
<i>Pseudoalteromonas citrea</i> DSM 8771T	GCF_000238375.3
<i>Pseudoalteromonas denitrificans</i> DSM 6059T	GCF_900112265.1
<b>*<i>Pseudoalteromonas distincta</i> 16-SW-7</b>	<b>GCF_005877035.1</b>
<b>*<i>Pseudoalteromonas distincta</i> 2-2A-13</b>	<b>JANIHL010000000</b>
<b>*<i>Pseudoalteromonas distincta</i> ANT/505</b>	<b>GCF_000212655.2</b>
<b>*<i>Pseudoalteromonas distincta</i> ATCC 700518T</b>	<b>GCF_000814675.1</b>
<b>*<i>Pseudoalteromonas distincta</i> U2A</b>	<b>GCF_008370225.1</b>
<i>Pseudoalteromonas donghaensis</i> HJ51T	GCF_003515105.1
<b>*<i>Pseudoalteromonas elyakovii</i> SM1926</b>	<b>GCF_007786285.1</b>
<i>Pseudoalteromonas elyakovii</i> VKPM B-3905T	JANJFO000000000
<i>Pseudoalteromonas espejiana</i> DSM 9414T	GCF_002221525.1
<i>Pseudoalteromonas espejiana</i> NBRC 102222T	GCF_007989585.1
<i>Pseudoalteromonas flavipulchra</i> DSM 14401T	GCF_014858715.1
<i>Pseudoalteromonas flavipulchra</i> LMG 20361T	GCF_014596995.1
<i>Pseudoalteromonas fuliginea</i> KMM 216T	GCF_000690055.1
<i>Pseudoalteromonas galathea</i> S4498T	GCF_005886105.2
<i>Pseudoalteromonas gelatinilytica</i> NH153T	GCF_001641615.1
<i>Pseudoalteromonas haloplanktis</i> ATCC 14393T	GCF_000238355.1
<i>Pseudoalteromonas issachenkonii</i> KCTC 12958	GCF_001455325.1
<i>Pseudoalteromonas issachenkonii</i> KMM 3549T	GCF_002310795.1
<i>Pseudoalteromonas lipolytica</i> CGMCC 1.8499T	GCF_900116435.1
<i>Pseudoalteromonas lipolytica</i> LMEB 39T	GCF_014925285.1
<i>Pseudoalteromonas luteoviolacea</i> CH130T	GCF_014925325.1
<i>Pseudoalteromonas luteoviolacea</i> DSM 6061T	GCF_001625655.1
<i>Pseudoalteromonas maricaloris</i> LMG 19692T	GCF_012641725.1
<i>Pseudoalteromonas marina</i> DSM 17587T	GCF_000238335.3
<i>Pseudoalteromonas mariniglutinosa</i> NCIMB 1770T	GCF_021613355.1
<i>Pseudoalteromonas neustonica</i> PAMC 28425T	GCF_001653135.1
<i>Pseudoalteromonas nigrifaciens</i> KMM 661T	GCF_002221505.1
<i>Pseudoalteromonas nigrifaciens</i> NBRC 103036T	GCF_007991255.1
<i>Pseudoalteromonas nigrifaciens</i> NCTC 10691T	GCF_900455185.1
<i>Pseudoalteromonas ostreae</i> hOe-66T	GCF_018069805.1
<b>*<i>Pseudoalteromonas paragorgicola</i> KMM 3548T</b>	<b>GCF_014918315.1</b>
<i>Pseudoalteromonas peptidolytica</i> DSM 14001T	GCF_012641745.1
<i>Pseudoalteromonas peptidolytica</i> F12-50-A1T	GCF_014858745.1
<i>Pseudoalteromonas peptidolytica</i> NBRC 101021T	GCF_007989895.1
<i>Pseudoalteromonas phenolica</i> JCM 21460T	GCF_014925335.1

<i>Pseudoalteromonas phenolica</i> KCTC 12086T	GCF_001444405.1
<i>Pseudoalteromonas phenolica</i> O-BC30T	GCF_004103265.1
<i>Pseudoalteromonas piratica</i> OCN003T	GCF_000788395.1
<i>Pseudoalteromonas piscicida</i> ATCC 15057T	GCF_000382005.1
<i>Pseudoalteromonas piscicida</i> JCM 20779T	GCF_000238315.3
<i>Pseudoalteromonas profundus</i> CGMCC 1.15394T	GCF_014642695.1
<i>Pseudoalteromonas prydzensis</i> ACAM 620T	GCF_014925355.1
<i>Pseudoalteromonas prydzensis</i> DSM 14232T	GCF_001661495.1
<i>Pseudoalteromonas rhizosphaerae</i> RA15T	GCF_902498845.1
<i>Pseudoalteromonas rubra</i> DSM 6842T	GCF_000238295.3
<i>Pseudoalteromonas ruthenica</i> LMG 19699T	GCF_008808095.1
<i>Pseudoalteromonas shioyasakiensis</i> JCM 18891T	GCF_001550135.1
<b>*<i>Pseudoalteromonas</i> sp. AC163</b>	<b>GCF_000497935.1</b>
<b>*<i>Pseudoalteromonas</i> sp. TAE79</b>	<b>GCF_000498015.1</b>
<b>*<i>Pseudoalteromonas</i> sp. TAE80</b>	<b>GCF_000498035.1</b>
<b>*<i>Pseudoalteromonas</i> sp. TB25</b>	<b>GCF_000497995.1</b>
" <i>Pseudoalteromonas spiralis</i> " DSM 16099	GCF_001596815.1
<i>Pseudoalteromonas spongiae</i> UST010723-006T	GCF_000238255.3
" <i>Pseudoalteromonas telluritireducens</i> " DSM 16098	GCF_001596795.1
<i>Pseudoalteromonas tetraodonis</i> GFCT	GCF_002310835.1
<i>Pseudoalteromonas tetraodonis</i> NBRC 103034T	GCF_007991235.1
<i>Pseudoalteromonas translucida</i> KMM 520T	GCF_001465295.1
<i>Pseudoalteromonas tunicata</i> D2T	GCF_000153245.1
<i>Pseudoalteromonas tunicata</i> D2T	GCF_003568825.1
<i>Pseudoalteromonas tunicata</i> DSM 14096T	GCF_002310815.1
<i>Pseudoalteromonas ulvae</i> UL12T	GCF_014925405.1
<i>Pseudoalteromonas undina</i> DSM 6065T	GCF_000238275.3

\*The strains belonging to the species *P. distincta* are in bold (this study)