

Pangenome evolution in the marine bacterium *Alteromonas*

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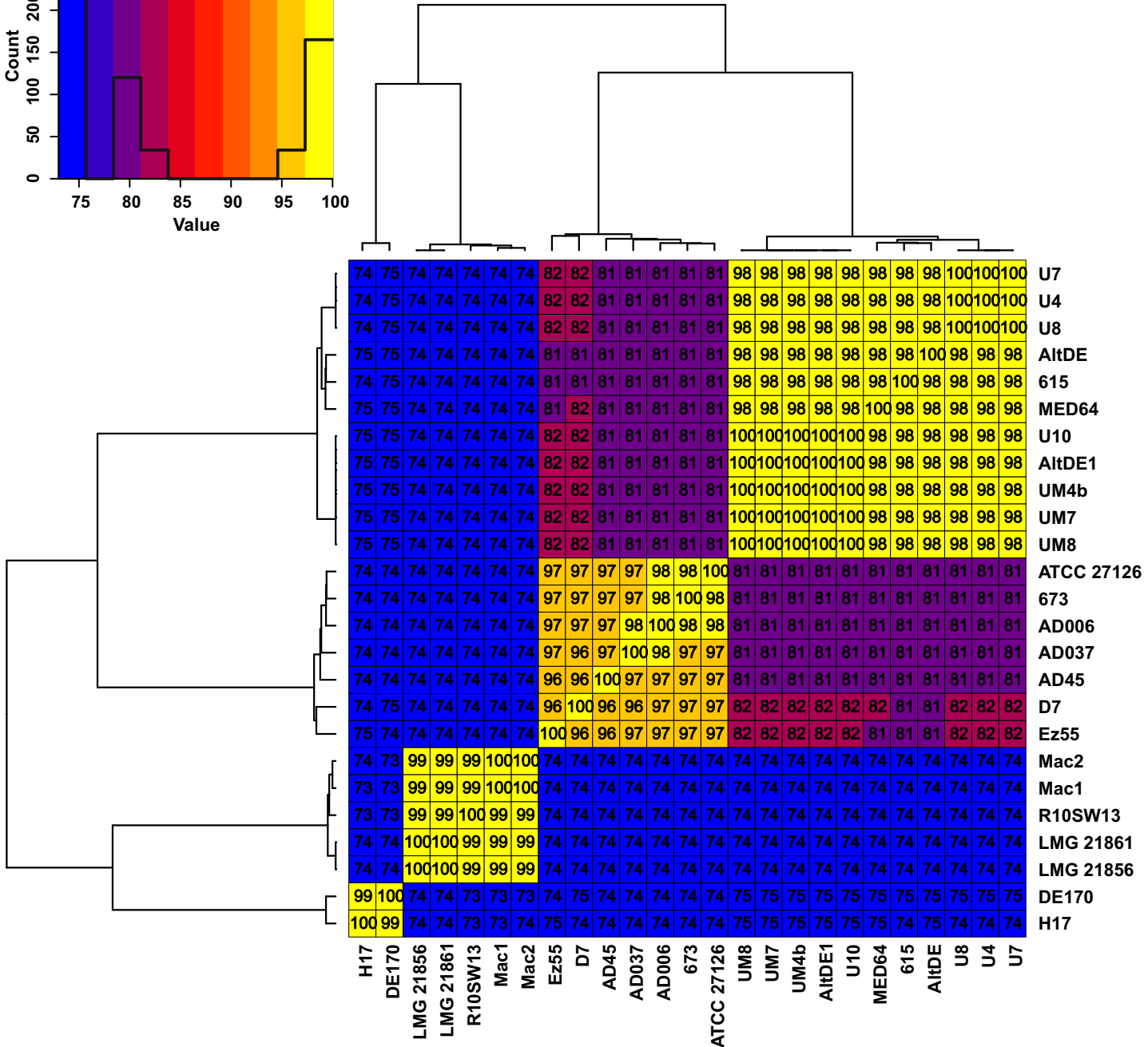
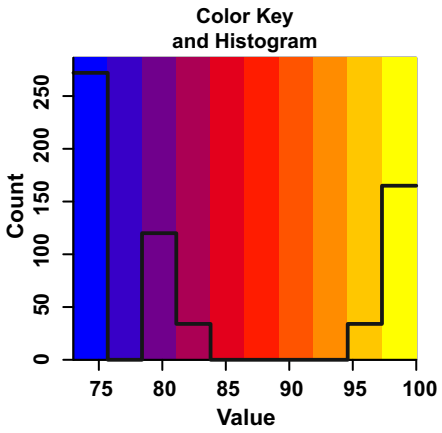
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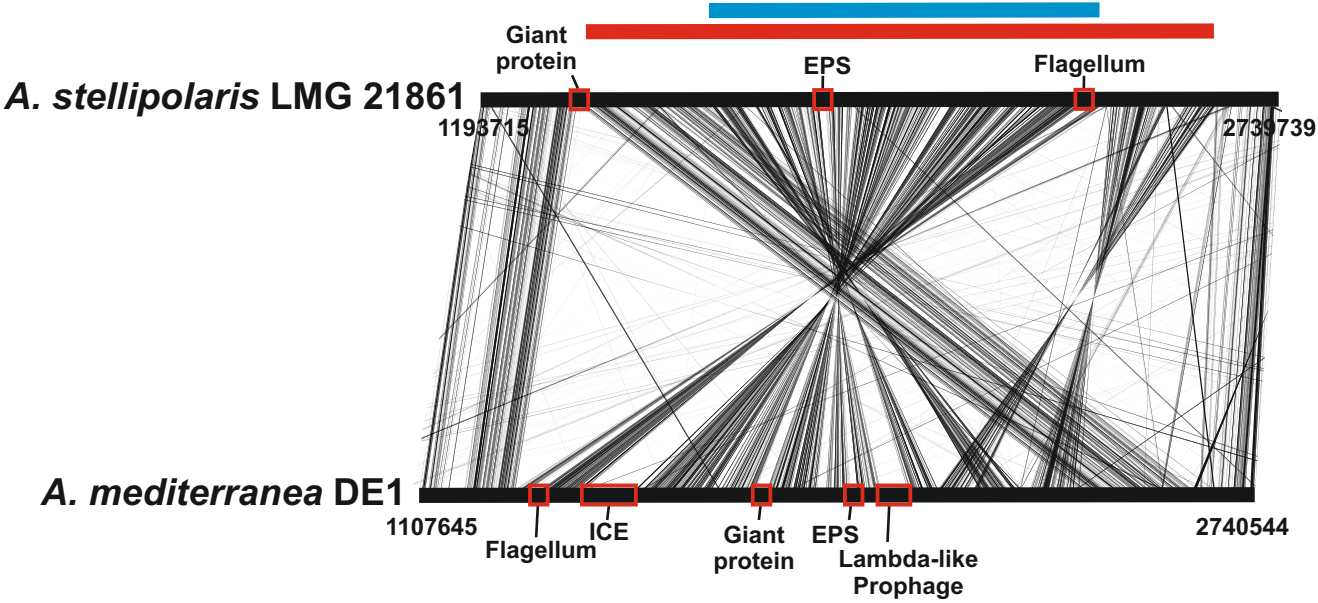
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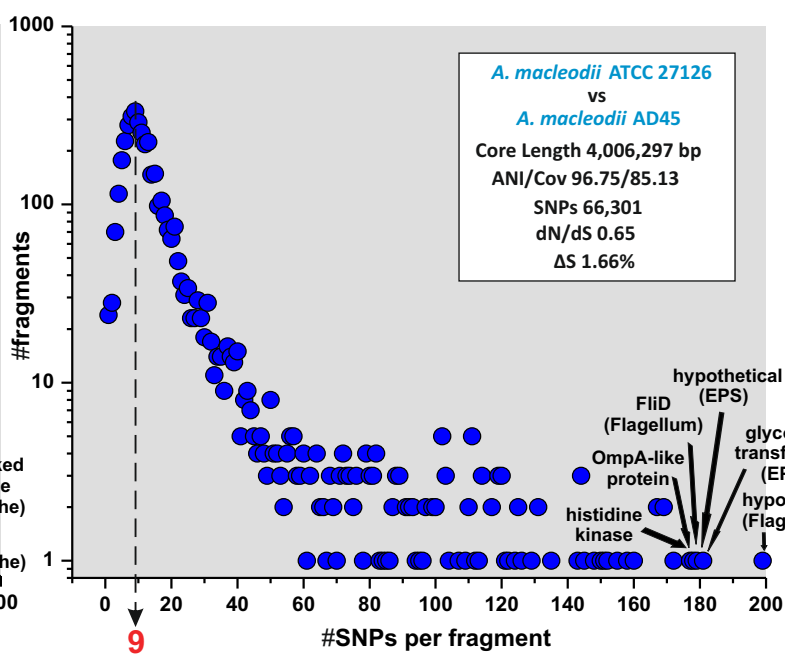
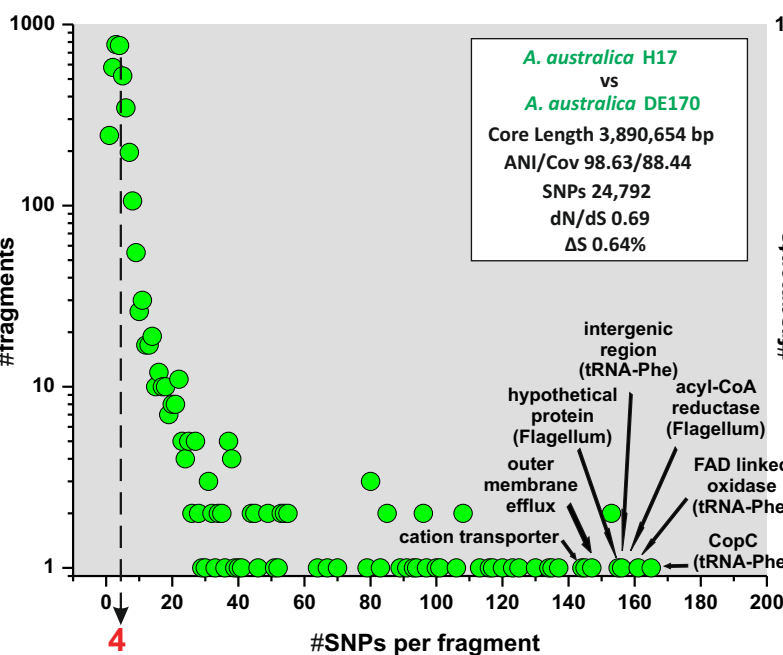
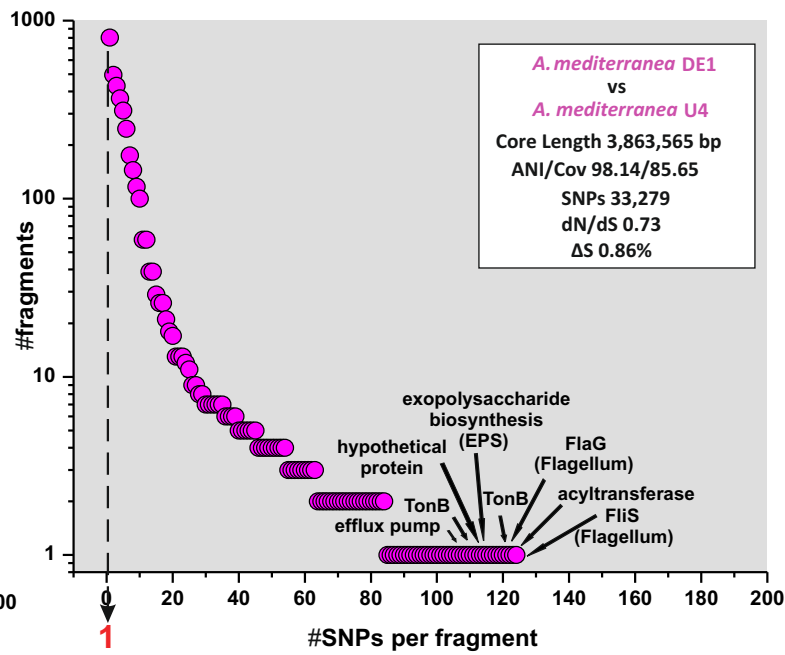
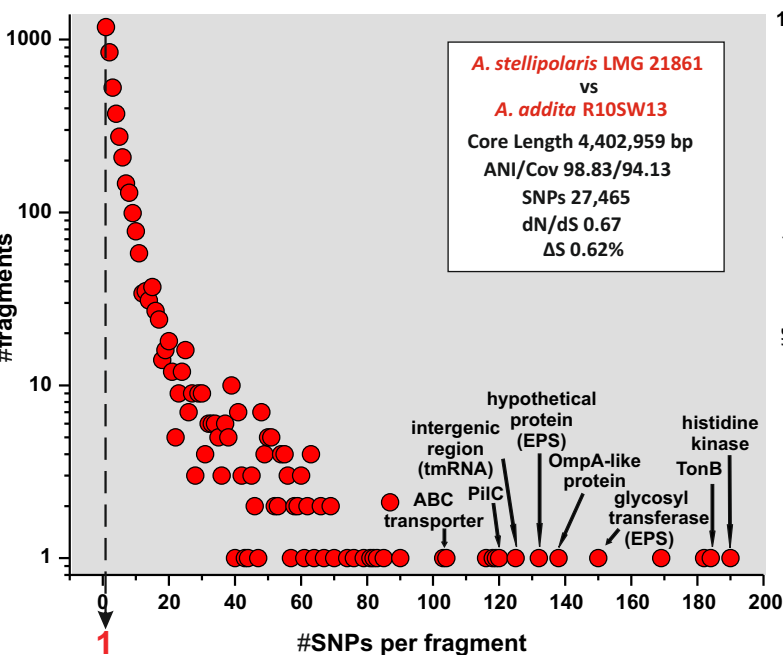
Supplementary Figure S1



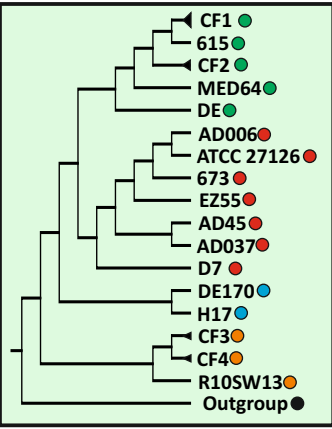
Supplementary Figure S2



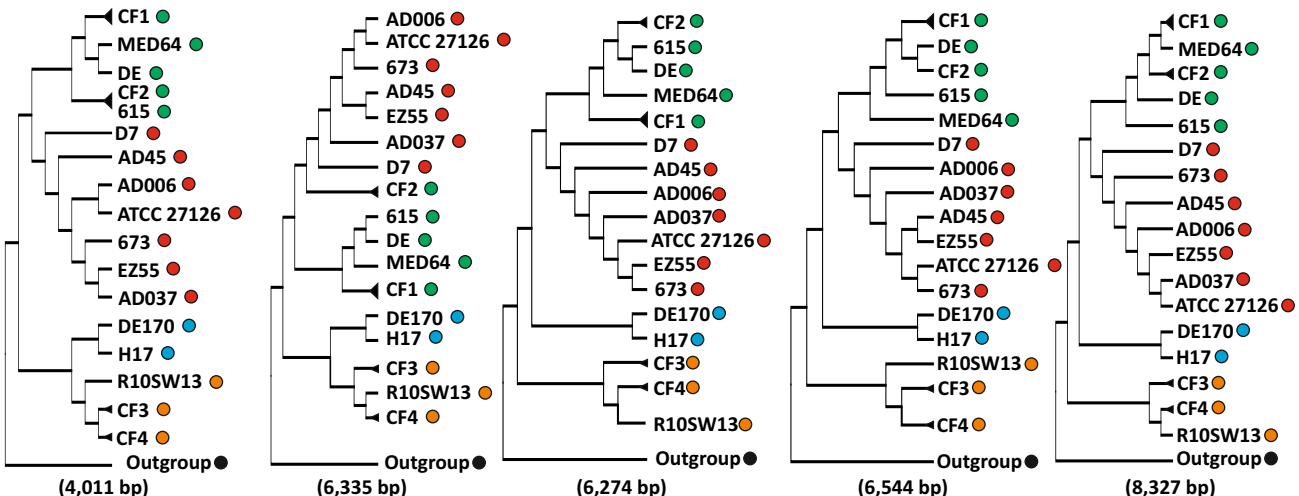
Supplementary Figure S3



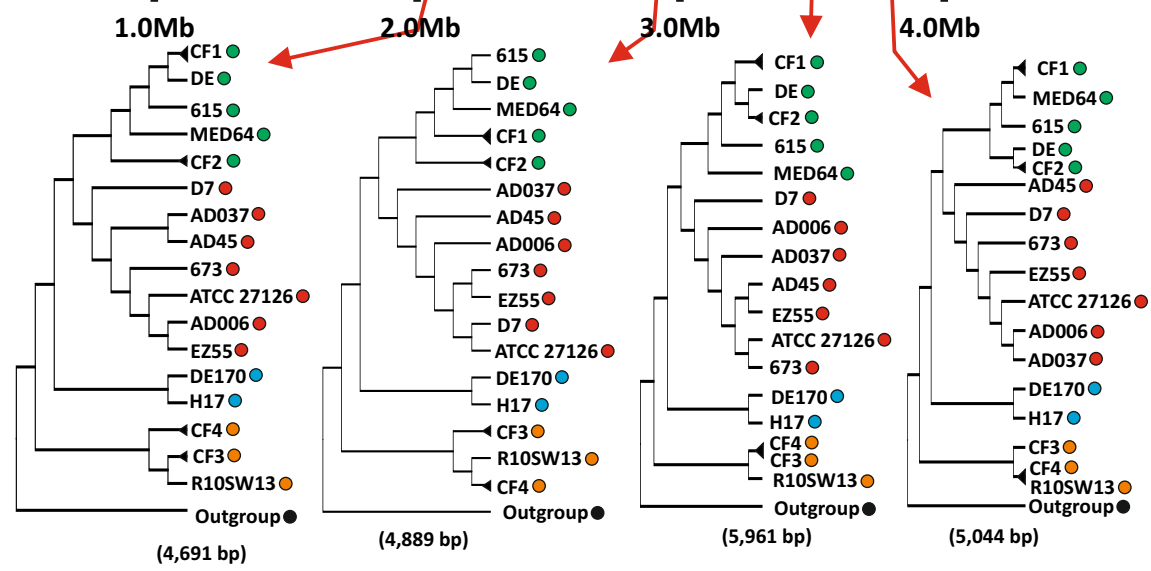
Supplementary Figure S4



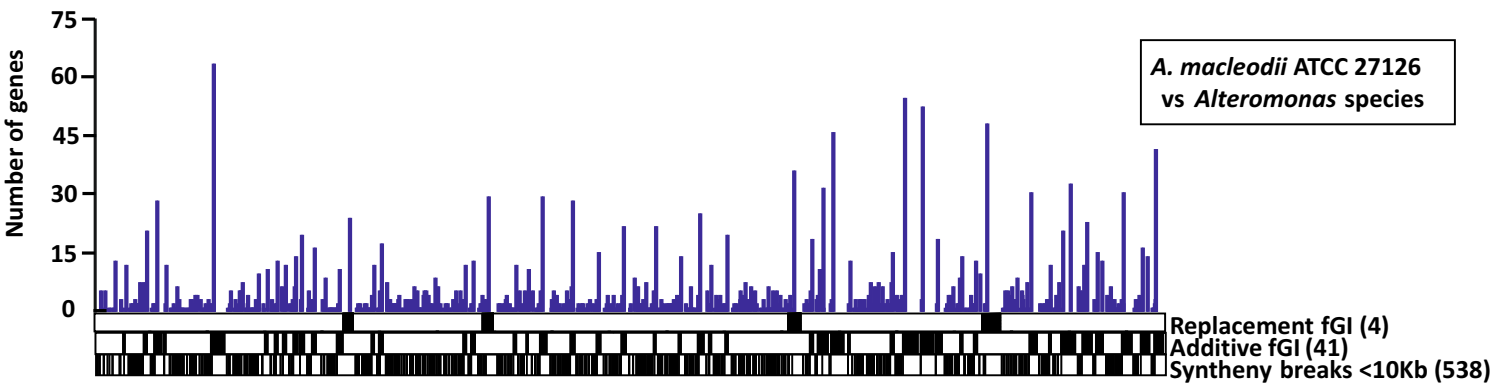
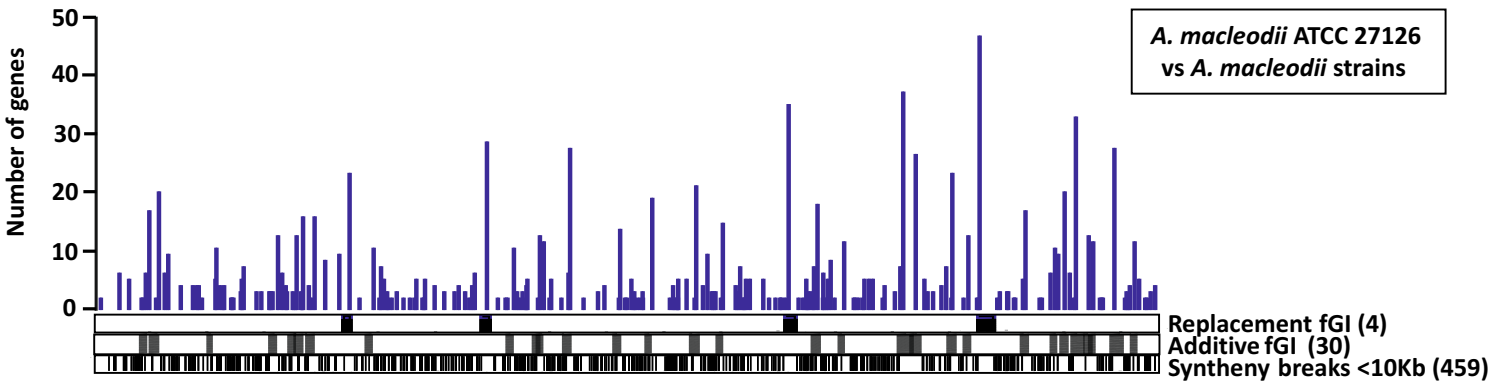
Consensus tree
(1,378,334 bp)



A. mediterranea DE1



Supplementary Figure S5

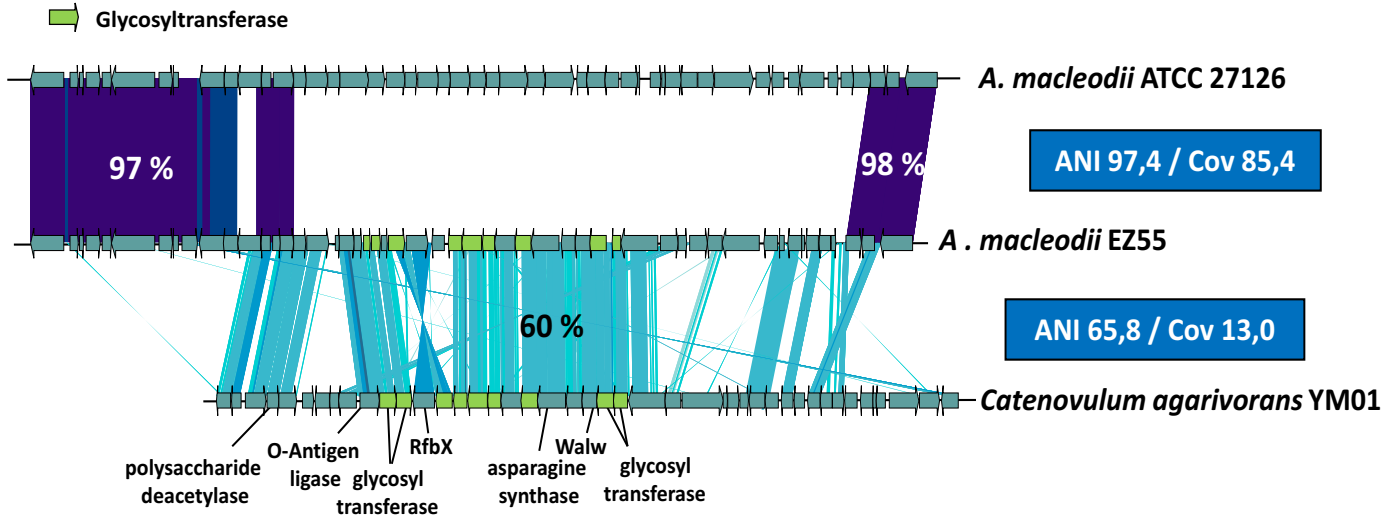


Supplementary Figure S6

% similarity



O-chain of the LPS



Flagellum glycosylation island

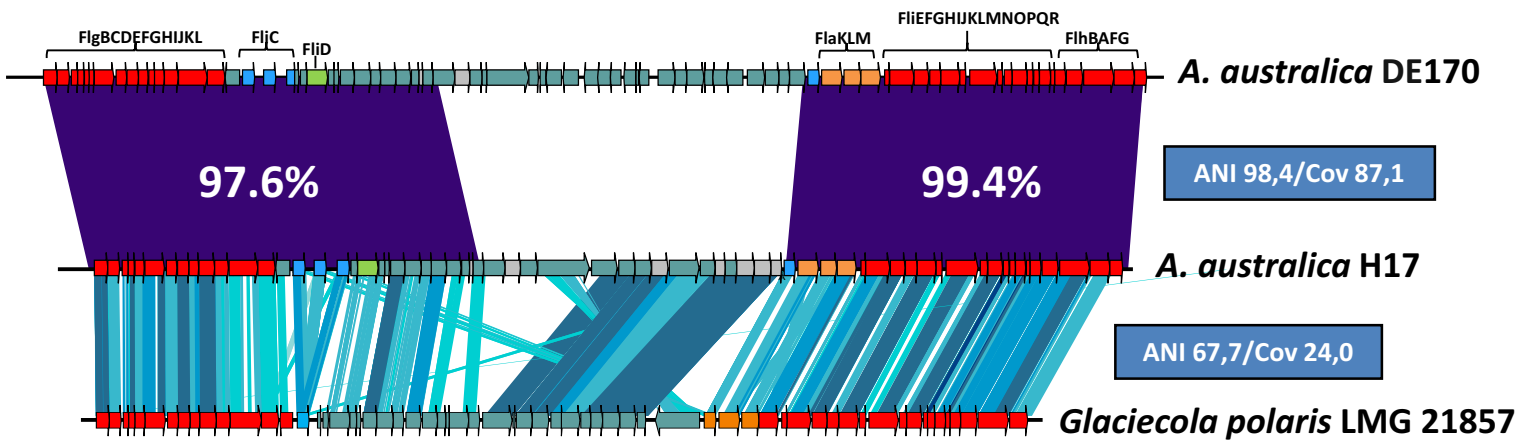


TABLE S1. *Alteromonas* isolates used in this study and their origin. Genomes that reported here for the first time are highlighted in red

<i>Alteromonas</i> strain	Origin isolated	Location	Date	Depth of Sample (m)
<i>A. mediterranea</i>				
DE ^T	Adriatic Sea	41°37'N, 17°22'E	2003	1000
DE1	Adriatic Sea	41°37'N, 17°22'E	2003	1000
615	English Channel	50°15'N, 4°16'W	2005	Surface
U4	Ionian Sea	35°13.83'N, 21°28.29'E	1998	3475
U7	Ionian Sea	35°13.83'N, 21°28.29'E	1998	3500
U8	Ionian Sea	35°13.83'N, 21°28.29'E	1998	3500
U10	Ionian Sea	35°13.83'N, 21°28.29'E	1998	3500
UM7	Ionian Sea	35°13.83'N, 21°28.29'E	1998	3475
UM8	Ionian Sea	35°13.83'N, 21°28.29'E	1998	3475
UM4b	Ionian Sea	35°13.83'N, 21°28.29'E	1998	3455
MED64	Aegean Sea	32°81'N, 34°69'E	2000	Surface
<i>A. macleodii</i>				
ATCC 27126 ^T	Pacific Ocean	21°17'23''N 157°58'34''W	1972	Surface
673	English Channel	50°15'N, 4°16'W	2005	Surface
AD45	Balearic Sea	--	2003	Surface
D7	Andaman Sea	08°00'N, 98°00'E	2000	Surface
EZ55	Sargasso Sea	--	2008	Surface
AD006	Malaysia: Port Dickson	2°31'21''N 101°48'14''E	2014	Surface
AD037	Malaysia: Port Dickson	2°31'21''N 101°48'14''E	2014	Surface
<i>A. australica</i>				
H 17 ^T	Tasman Sea	37°52'10''S 144°58'27''E	2007	Surface
DE170	Adriatic Sea	41°37'N, 17°22'E	2003	1000
<i>A. addita</i>				
R10SW13 ^T	Sea of Japan	42°40'23''N 131°38'42''E	2000	Surface
<i>A. stellipolaris</i>				
LMG 21861 ^T	Antarctic Sea	66° 20.0' S 08° 53.4' E	1999	25
LMG 21856	Antarctic Sea	66° 21.9' S 33° 46.7' E	1999	25
<i>Alteromonas</i> sp.				
Mac1	Mediterranean Sea	38°25'48'' N 0°22'25'' W	2014	Surface
Mac2	Mediterranean Sea	38°25'48'' N 0°22'25'' W	2014	Surface

TABLE S2. The twenty genes with the highest dN /dS values obtained within the *A. mediterranea* strains.

<i>A. mediterranea</i> DE1 coordinates	dN /dS	Gene product
3,596,902 - 3,598,002	3.97	permease YjgP/YjgQ CDS
168,106 - 168,915	3.78	hypothetical protein
2,984,023 - 2,983,268	3.43	hypothetical protein
1,513,585 - 1,512,839	3.29	Enoyl-CoA hydratase/isomerase
1,216,789 - 1,219,386	3.16	alanyl-tRNA synthetase
2,252,675 - 2,254,264	2.97	hypothetical protein TPR (tetratricopeptide repeat)
2,403,655 - 2,405,973	2.89	Predicted exporters of the RND superfamily
4,214,839 - 4,212,998	2.55	amino acid ABC transporter/signal transduction system
487,898 - 489,037	2.27	RND family efflux transporter MFP subunit
2,291,861 - 2,294,728	2.24	TonB-dependent receptor
4,295,677 - 4,298,625	2.18	TonB-dependent receptor
1,508,773 - 1,506,896	2.11	ABC transporter ATP-binding protein/permease
4,256,192 - 4,254,591	2.10	p-aminobenzoyl-glutamate transport
3,531,718 - 3,529,364	1.98	Histidine kinase (aerobic respiration control sensor protein ArcB)
2,434,188 - 2,432,557	1.96	Glutamate synthase
2,355,773 - 2,354,532	1.95	Radical SAM
2,422,725 - 2,421,418	1.92	deoxyribodipyrimidine photolyase
1,494,510 - 1,494,094	1.88	hypothetical protein
1,768,924 - 1,767,671	1.76	proton/glutamate symporter
480,575 - 482,266	1.71	gamma-glutamyltransferase