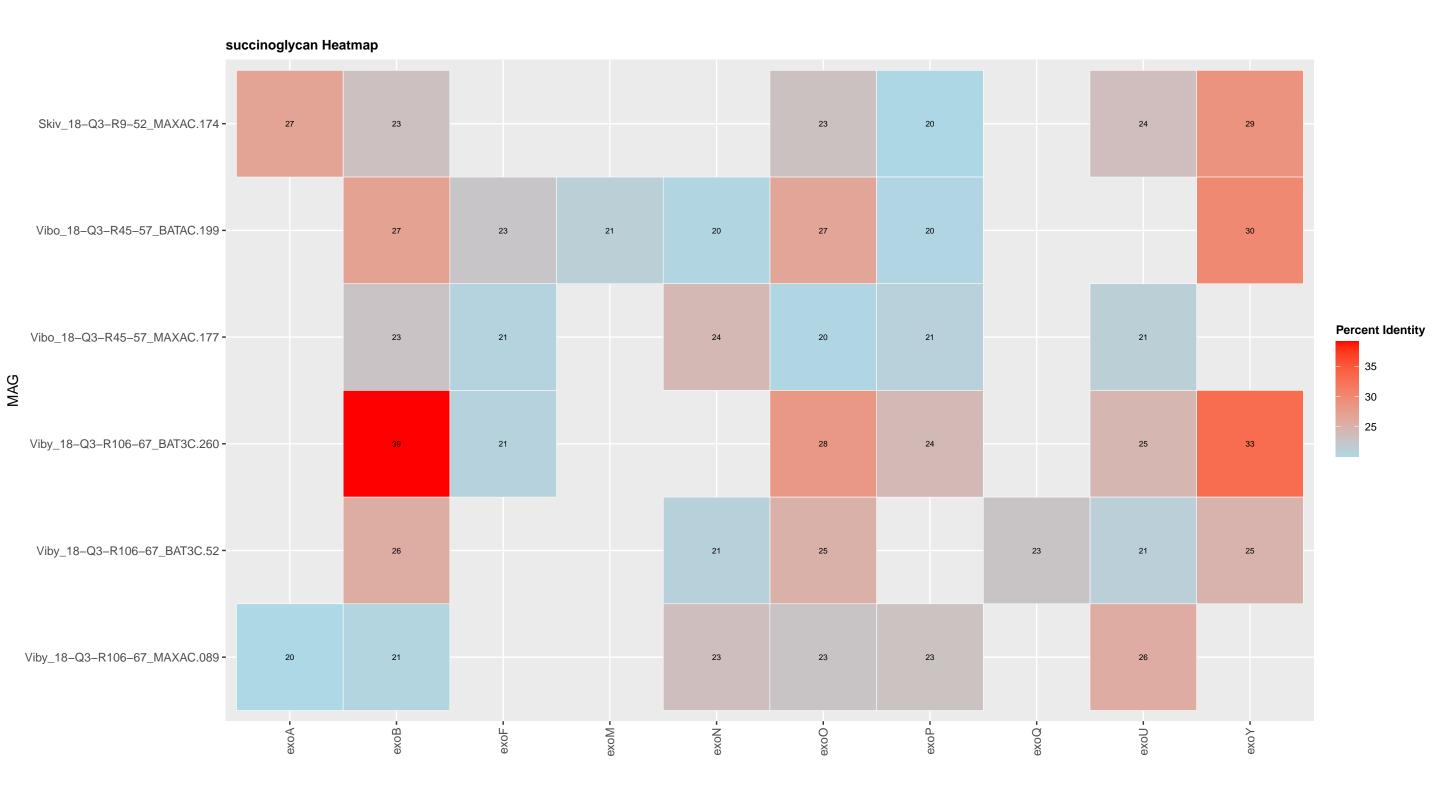
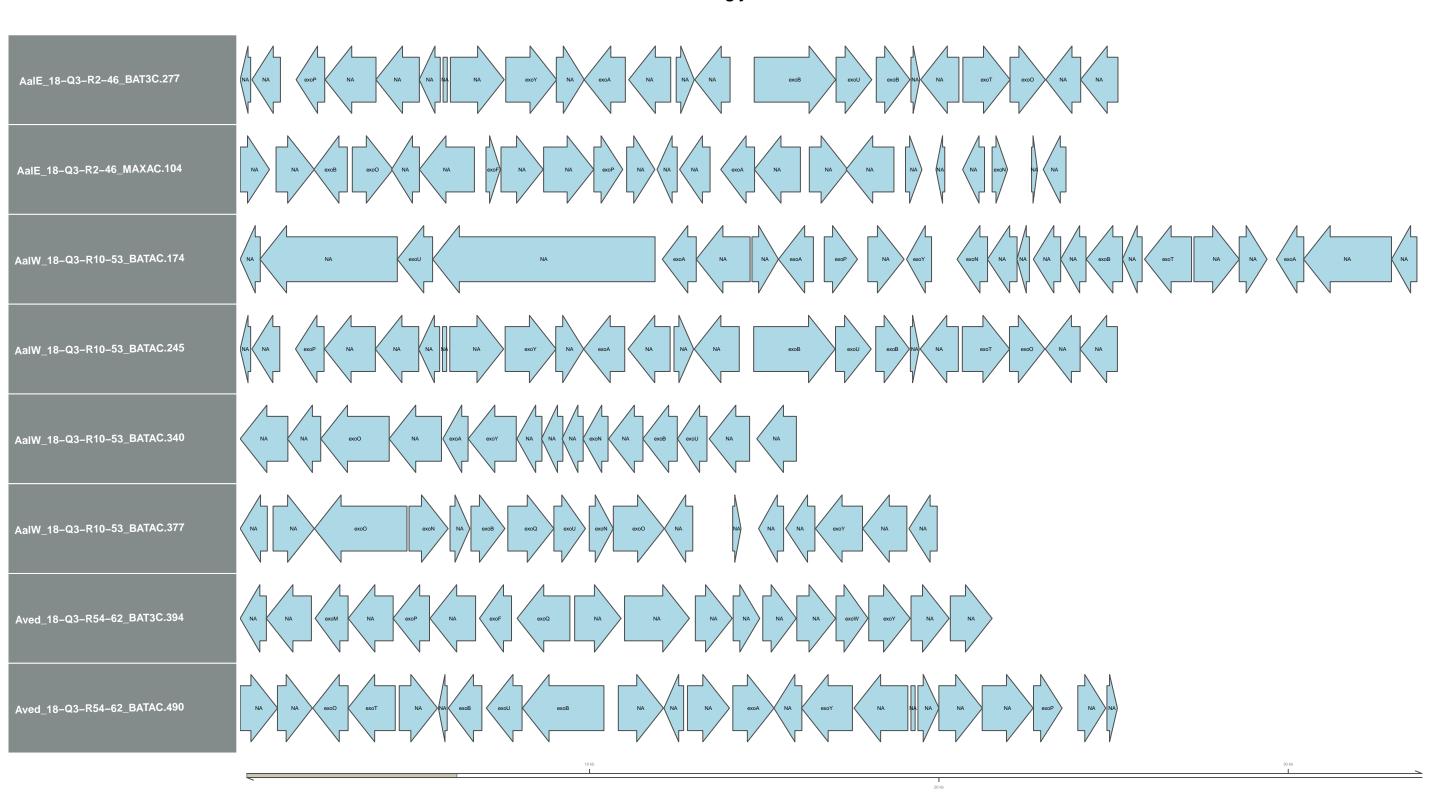
succinoglycan Heatmap AaIE_18-Q3-R2-46_BAT3C.277 -AaIE_18-Q3-R2-46_MAXAC.104 -AalW_18-Q3-R10-53_BATAC.174 - 21 AalW_18-Q3-R10-53_BATAC.245 -AalW_18-Q3-R10-53_BATAC.340 -AaIW_18-Q3-R10-53_BATAC.377 -**Percent Identity** Aved_18-Q3-R54-62_BAT3C.394 -O Aved_18-Q3-R54-62_BATAC.490 - 22 Aved_18-Q3-R54-62_MAXAC.105 -Bjer_18-Q3-R1-45_BATAC.230 -Bjer_18-Q3-R1-45_MAXAC.004 -Bjer_18-Q3-R1-45_MAXAC.141 -Ega_18-Q3-R5-49_BATAC.118 -Ega_18-Q3-R5-49_BATAC.213 -EsbE_18-Q3-R3-47_BATAC.463 -exoB exoU ехоХ exoP

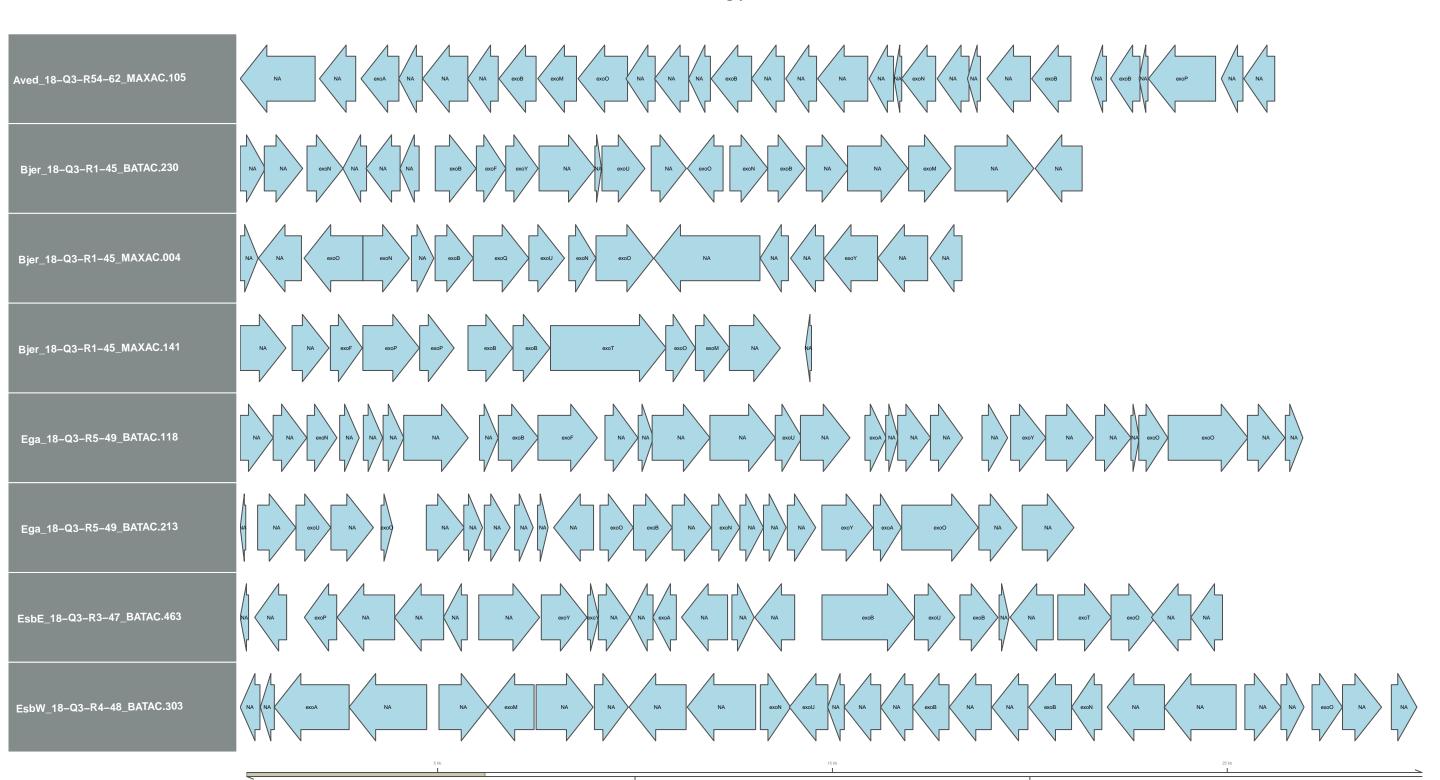
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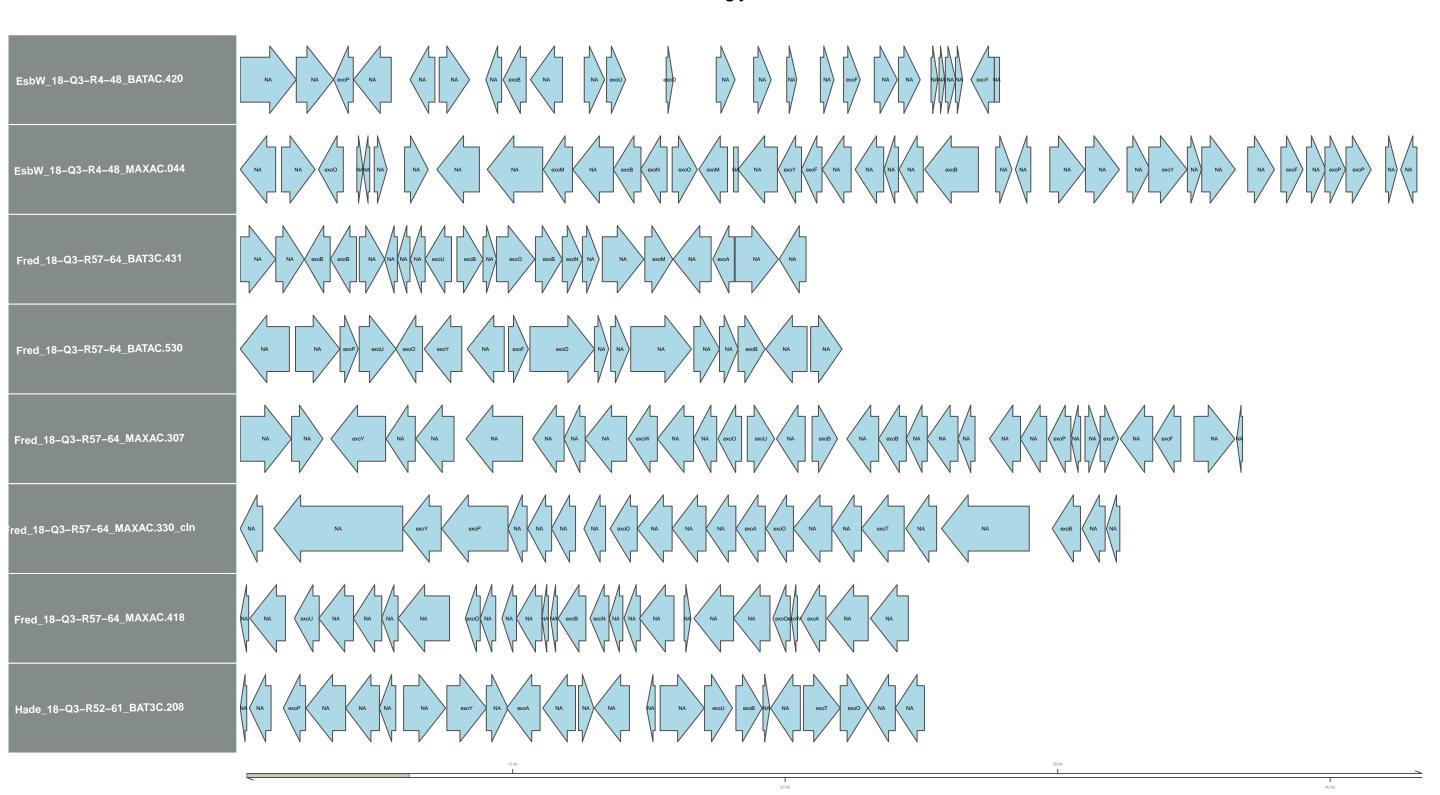
Percent Identity

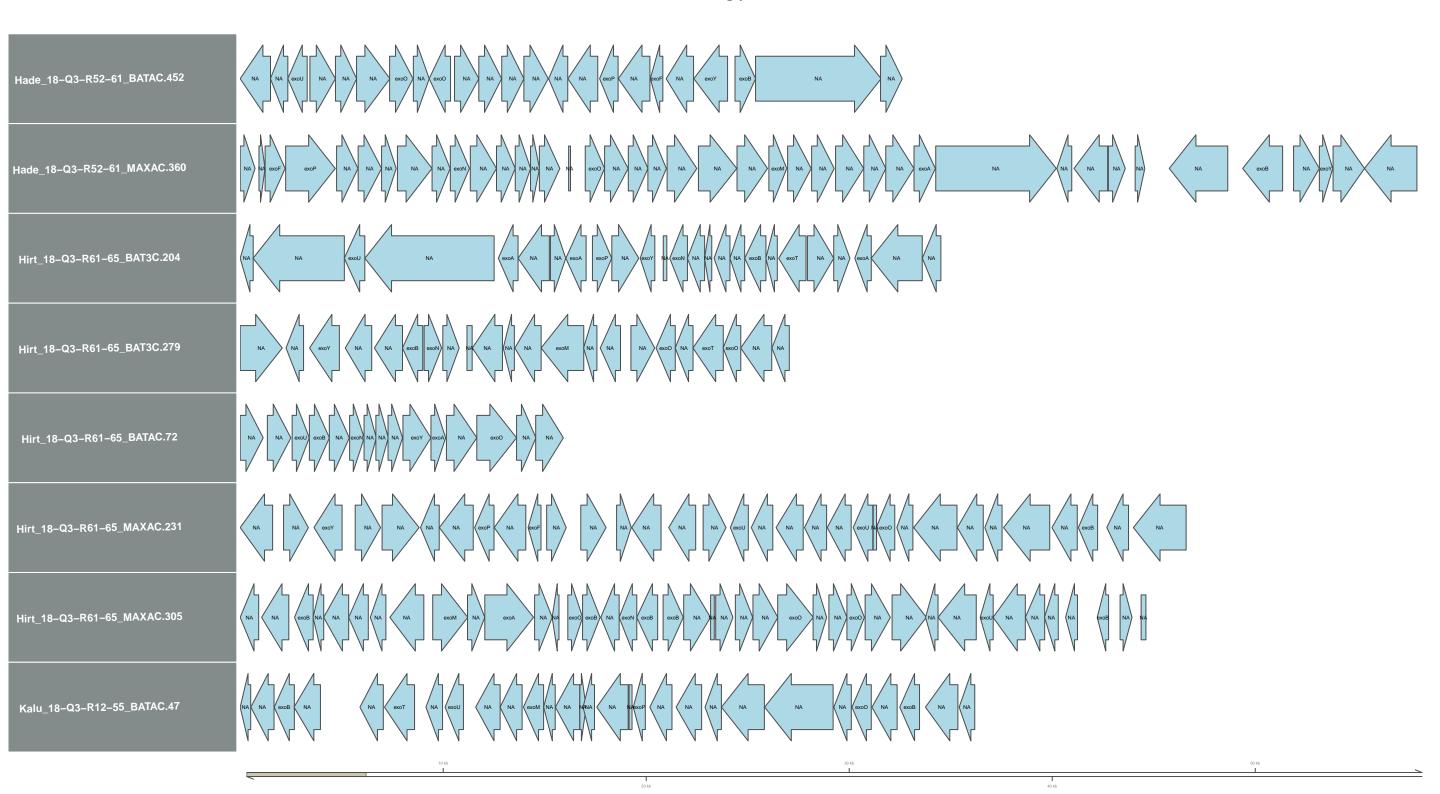
succinoglycan Heatmap Hirt_18-Q3-R61-65_MAXAC.305 -Kalu_18-Q3-R12-55_BATAC.47 -Kalu_18-Q3-R12-55_MAXAC.123 - 22 Kalu_18-Q3-R12-55_MAXAC.132v2 -Kalu_18-Q3-R12-55_MAXAC.148 -Kalu_18-Q3-R12-55_MAXAC.198_cln - 21 Percent Identity Lyne_18-Q3-R50-59_BAT3C.630 -Mari_18-Q3-R65-66_BATAC.299 -OdNE_18-Q3-R46-58_BATAC.16 -Ribe_18-Q3-R11-54_BATAC.412 -Ribe_18-Q3-R11-54_BATAC.569 -Ribe_18-Q3-R11-54_MAXAC.200 -Ribe_18-Q3-R11-54_MAXAC.235 -Skiv_18-Q3-R9-52_BATAC.351 -Skiv_18-Q3-R9-52_BATAC.396 -exoA exoL

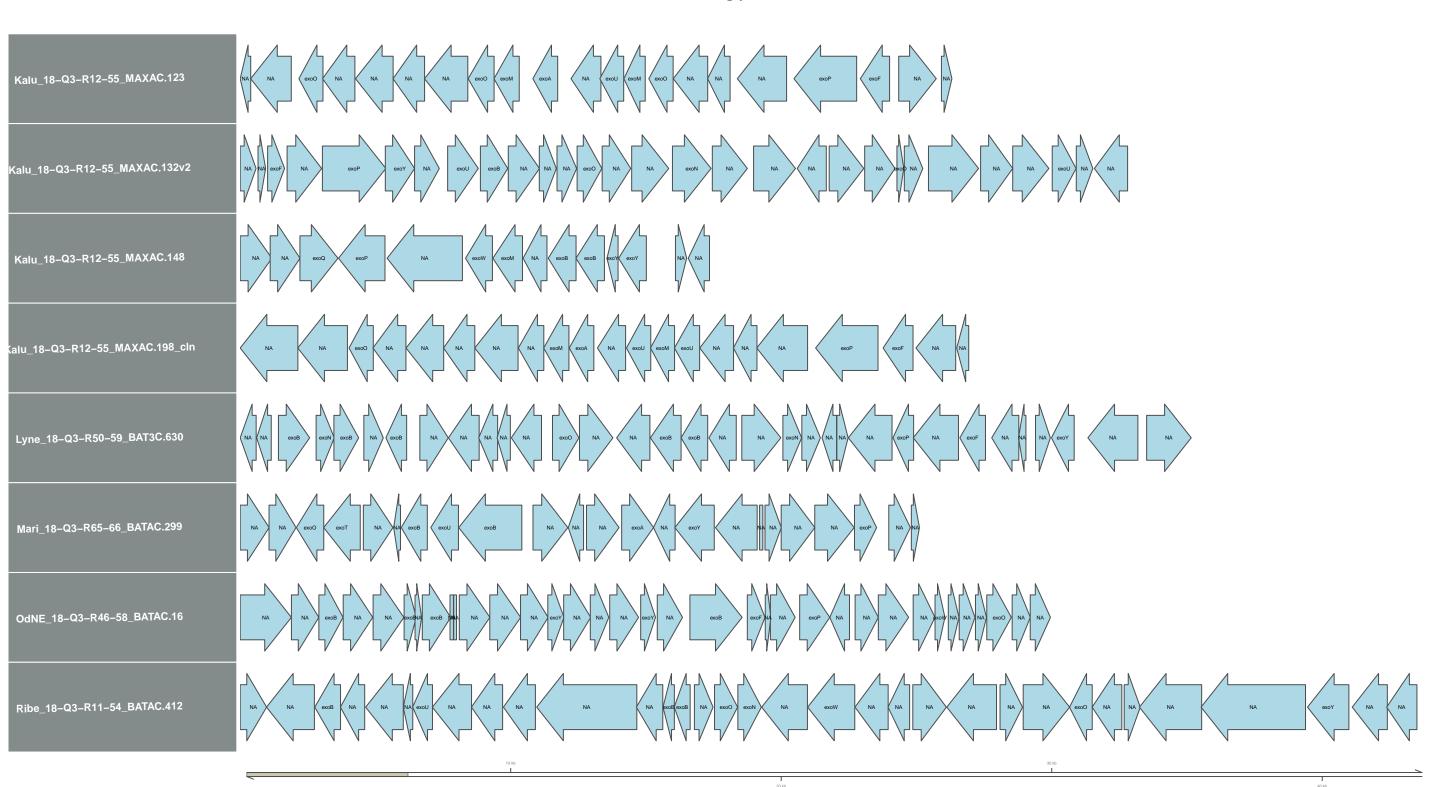


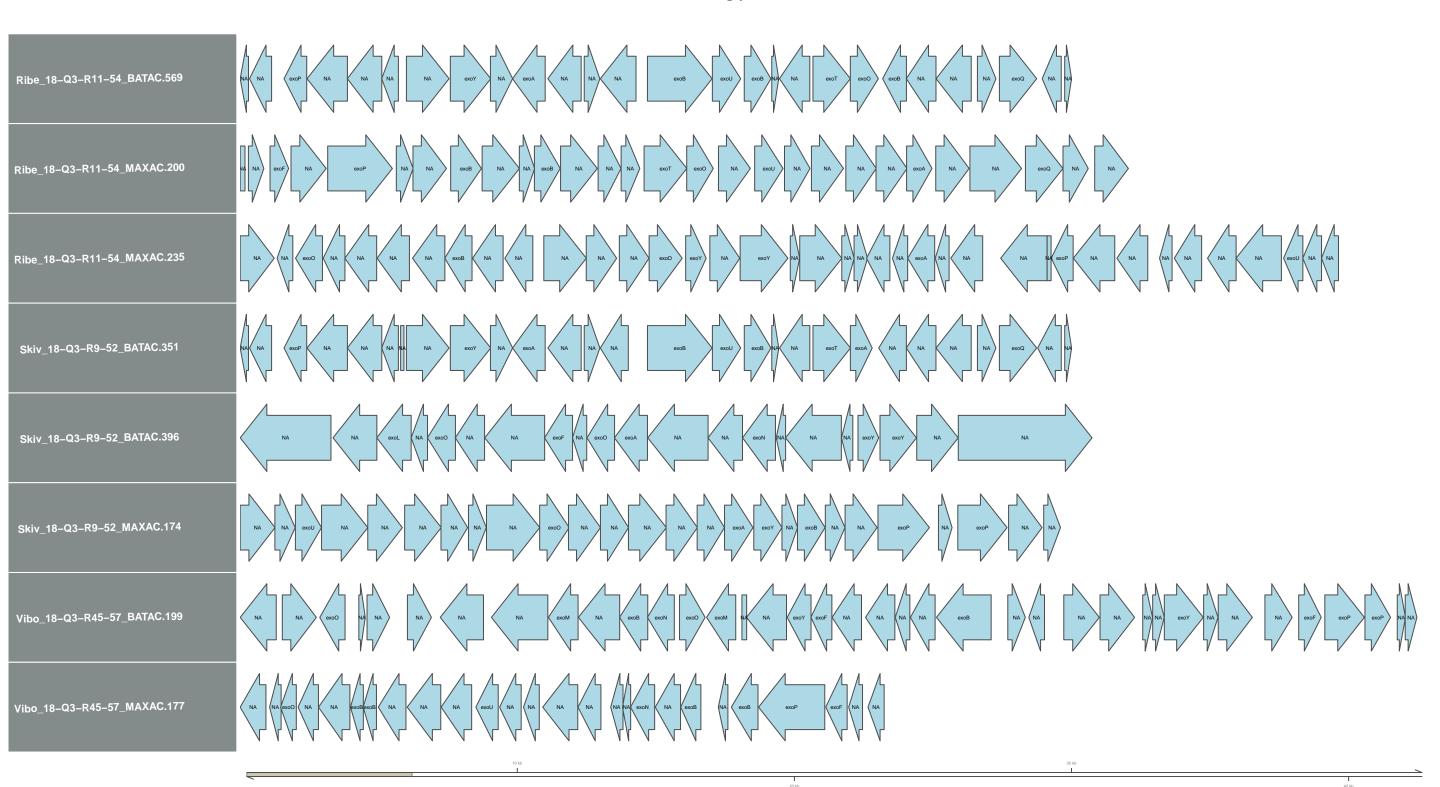


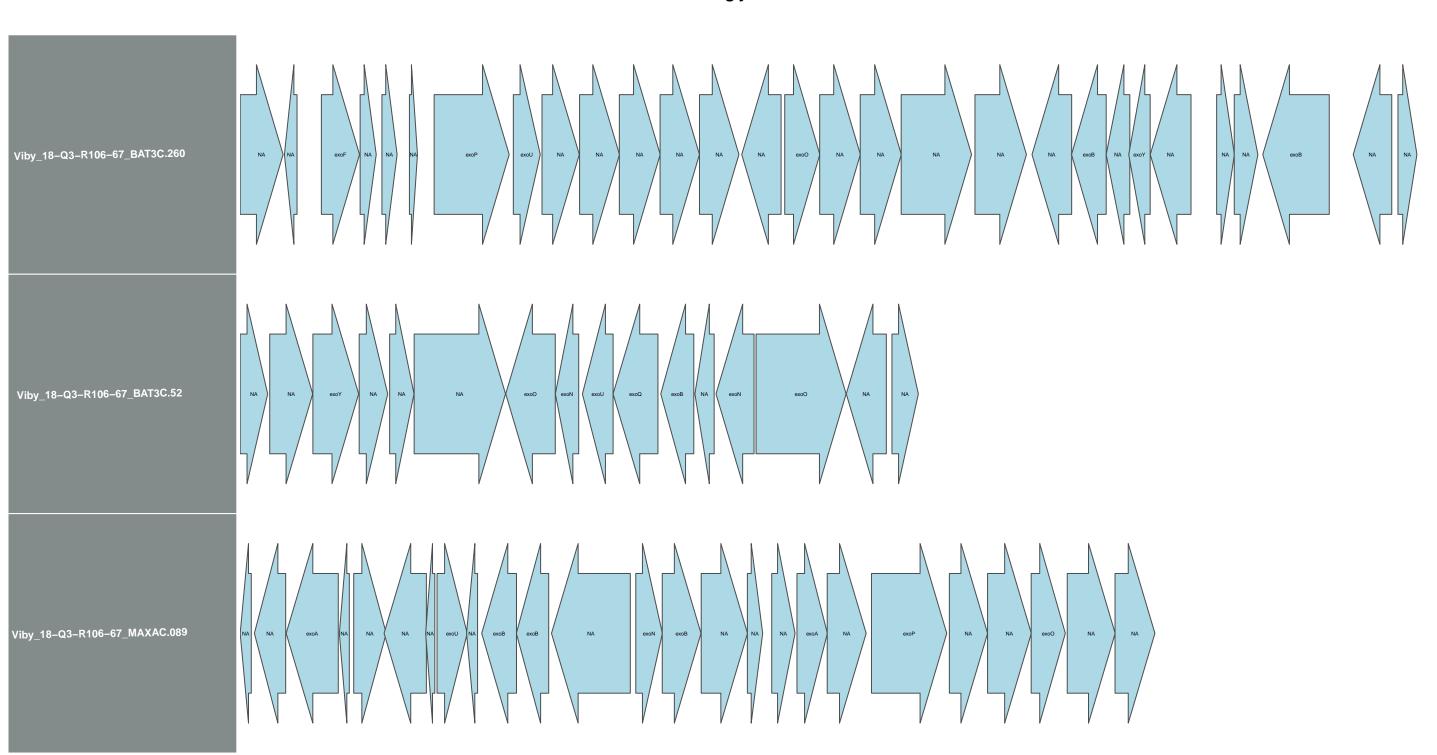












20.16

3	AaIW_18-Q3-R10-53_BATAC.174	$\label{lem:d_bacteria} \\ \texttt{d_Bacteria}; \texttt{p_Proteobacteria}; \texttt{c_Alphaproteobacteria}; \texttt{o_Rhodobacterales}; \texttt{f_Rhodobacteraceae}; \texttt{g_Rhodobacteraceae}; g$	tig00006255-10-4666680	192771	exoA	00814
4	AaIW_18-Q3-R10-53_BATAC.245	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_UBA1936;s_	tig01697704-10-12945580	680808	exoA	02970
5	AalW_18-Q3-R10-53_BATAC.340	d_Bacteria;p_Bacteroidota;c_Ignavibacteria;o_SJA-28;f_B-1AR;g_;s_	tig00005253-10-6246180	142494	exoA	00121
6	AalW_18-Q3-R10-53_BATAC.377	${\tt d_Bacteria.p_Actinobacteriota;c_Acidimicrobiia.o_Microtrichales;t_Microtrichaceae;g_Microtrix;s_Microtrix parvicella}$	tig00001645-10-8295780	325352	exoB	00298
7	Aved_18-Q3-R54-62_BAT3C.394	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;t_Burkholderiaceae;g_PHCl01;s_	tig00006722-10-5174190	407210	exoF	00895
8	Aved_18-Q3-R54-62_BATAC.490	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_UBA1936;s_	tig00373198-10-16596610	603961	exoA	02141
9	Aved_18-Q3-R54-62_MAXAC.105	d_Bacteria;p_Bacteroidota;c_Bacteroidia;o_Chitinophagales;t_Chitinophagaceae;g_JJ008;s_	tig00005322-10-6493790	202244	exoA	03719
10	Bjer_18-Q3-R1-45_BATAC.230	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_UKL13-2;g_FEB-7;s_	tig00009630-10-1594380	74297	exoB	02872
11	Bjer_18-Q3-R1-45_MAXAC.004	${\tt d_Bacteria.p_Actinobacteriota;c_Acidimicrobiia.o_Microtrichales;t_Microtrichaceae;g_Microtrix;s_Microtrix parvicella}$	tig00001276-10-1080800	17069	exoB	01710
12	Bjer_18-Q3-R1-45_MAXAC.141	$d_Bacteria; p_Proteobacteria; c_Gamma proteobacteria; o_Burkholderiales; f_Burkholderiaceae; g_Rhodoferax; s_Burkholderiaceae; g_Rhodoferax; s_Rhodoferax; s_Rho$	tig00007500-10-375860	15584	exoB	02648
13	Ega_18-Q3-R5-49_BATAC.118	d_Bacteria;p_Bacteroidota;c_UBA10030;o_UBA10030;1_UBA6906;g_;s_	tig00000655-10-8431380	445130	exoA	00373
14	Ega_18-Q3-R5-49_BATAC.213	d_Bacteria;p_Bacteroidota;c_Ignavibacteria;o_SJA-28;f_B-1AR;g_UBA2330;s_	tig00001507-10-3777870	31514	exoA	00631
15	EsbE_18-Q3-R3-47_BATAC.463	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_UBA1936;s_	tig00004449-10-2095470	175532	exoA	00749
16	EsbW_18-Q3-R4-48_BATAC.303	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_UKL13-2;g_FEB-7;s_	tig00005920-10-4953880	466076	exoA	01920
17	EsbW_18-Q3-R4-48_BATAC.420	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_UBA5518;g_UBA5518;s_UBA5518 sp002396625	tig00000538-10-9280820	910395	exoB	00832
18	EsbW_18-Q3-R4-48_MAXAC.044	${\tt d_Bacteria:p_Proteobacteria:c_Gammaproteobacteria:o_Burkholderiales:f_Rhodocyclaceae:g_Propionivibrio;s$	tig00033796-10-615360	34360	exoB	03350
19	Fred_18-Q3-R57-64_BAT3C.431	d_Archaea;p_lainarchaeota;c_lainarchaeia;o_;f_;g;s_	tig00000848-10-10480140	531808	exoA	00590
20	Fred_18-Q3-R57-64_BATAC.530	d_Bacteria;p_Planctomycetota;c_UBA1135;o_UBA2386;f_UBA2386;g_;s_	tig00002018-10-12358610	429026	exoB	00341
21	Fred_18-Q3-R57-64_MAXAC.307	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales_A;f_2-12-FULL-67-15;g_:s_	tig00002301-10-12040470	30377	exoB	02427
22	Fred_18-Q3-R57-64_MAXAC.330_cln	d_Bacteria;p_Planctomycetota;c_Phycisphaerae;o_Phycisphaerales;f_SM1A02;g_UBA2402;s_	tig00000055-10-33509940	2634095	exoA	02163
23	Fred_18-Q3-R57-64_MAXAC.418	d_Bacteria;p_Planctomycetota;c_Phycisphaerae;o_UBA1845;f_UTPLA1;g_UTPLA1;s_	tig00010737-10-2712970	148466	exoA	00721
24	Hade_18-Q3-R52-61_BAT3C.208	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_UBA1936;s_	tig00011908-10-1495380	100367	exoA	01707
25	Hade_18-Q3-R52-61_BATAC.452	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_UKL13-2;g_FEB-7;s_	tig000000768-10-11872970	1028071	exoB	02987
26	Hade_18-Q3-R52-61_MAXAC.360	${\tt d_Bacteria:p_Acidobacteriota:c_Blastocatellia:o_Pyrinomonadales;f_Pyrinomonadaceae:g_OLB17:s_CLB1$	tig00000009-10-41445700	2075127	exoA	01740
27	Hirt_18-Q3-R61-65_BAT3C.204	${\tt d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae;g_Rhodobacter_E;s_Rhodobacteraceae;g_Rhodobacteraceae;$	tig00317261-10-8095540	432468	exoA	02789
28	Hirt_18-Q3-R61-65_BAT3C.279	d_Bacteria;p_Actinobacteriota;c_Actinobacteria;o_Propionibacteriales;t_Propionibacteriaceae;g_Micropruina;s_	tig00004475-10-5985650	528511	exoB	03542
29	Hirt_18-Q3-R61-65_BATAC.72	d_Bacteria;p_Bacteroidota;c_Ignavibacteria;o_SJA-28;f_B-1AR;g_UBA2330;s_	tig00001530-10-13738940	1253794	exoA	01148
30	Hirt_18-Q3-R61-65_MAXAC.231	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_Rhodocyclaceae;g_;s_	tig00000003-10-42710140	1916783	exoB	01732
31	Hirt_18-Q3-R61-65_MAXAC.305	${\tt d_Bacteria;p_Bdellovibrionota;c_Bdellovibrionia;o_Bdellovibrionales;f_UBA1609;g_;s_}$	tig00316322-10-14895540	470547	exoA	02145
32	Kalu_18-Q3-R12-55_BATAC.47	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_Promineofilales;t_Promineofilaceae;g_GCA-2746795;s_	tig00005364-10-1962320	177173	exoB	04585
33	Kalu_18-Q3-R12-55_MAXAC.123	d_Bacteria;p_Acidobacteriota;c_Blastocatellia;o_Pyrinomonadales;f_:g;s_	tig00002532-10-4929450	161505	exoA	00967
34	Kalu_18-Q3-R12-55_MAXAC.132v2	d_Bacteria;p_Nitrospirota;c_Nitrospiria;o_Nitrospirales;f_Nitrospiraceae;g_Nitrospira;s_	tig00001930-10-7323120	314090	exoB	01623
35	Kalu_18-Q3-R12-55_MAXAC.148	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales_Af_2-12-FULL-67-15;g_;s_	tig00002375-10-5189380	172715	exoB	00819
36	Kalu_18-Q3-R12-55_MAXAC.198_cln	d_Bacteria;p_Acidobacteriota;c_Blastocatellia;o_Pyrinomonadales;t_;g_;s_	tig00000005-10-63322080	3306089	exoA	02552
37	Lyne_18-Q3-R50-59_BAT3C.630	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Ga0077536;f_Ga0077536;g_;s_	tig00011870-10-2387850	23401	exoB	02650
38	Mari_18-Q3-R65-66_BATAC.299	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_UBA1936;s_	tig00869144-10-6422420	423088	exoA	02513
39	OdNE_18-Q3-R46-58_BATAC.16	d_Bacteria;p_Bacteroidota;c_Bacteroidia;o_Flavobacteriales;f_Flavobacteriaceae;g_Flavobacterium;s_	tig00004974-10-2765880	29729	exoB	00728
40	Ribe_18-Q3-R11-54_BATAC.412	d_Bacteria;p_Actinobacteriota;c_Actinobacteria;o_Nanopelagicales:f_S36-B12;g_UBA10649;s_	tig00001979-10-5826140	256925	exoB	01123
41	Ribe_18-Q3-R11-54_BATAC.569	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_UBA1936;s_	tig01084768-10-3860630	334067	exoA	03109
42	Ribe_18-Q3-R11-54_MAXAC.200	d_Bacteria.p_Nitrospirata;c_Nitrospiraia;o_Nitrospirales;f_Nitrospiraceae;g_Nitrospira;s_Nitrospira sp002254365	tig00277293-10-36755620	3517703	exoA	03591
43	Ribe_18-Q3-R11-54_MAXAC.235	d_Bacteria;p_Chloroflexota;c_Chloroflexia;o_Chloroflexales;f_Roseiflexaceae;g_Kouleothrix;s_	tig00000009-10-56372800	574899	exoA	00444
44	Skiv_18-Q3-R9-52_BATAC.351	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_UBA1936;s_	tig00287756-10-1221250	100017	exoA	03437
45	Skiv_18-Q3-R9-52_BATAC.396	d_Bacteria;p_Acidobacteriota;c_Acidobacteriae;o_Bryobacterales;f_Bryobacteraceae;g_UBA690;s_	tig00003208-10-5214800	254160	exoA	01757
46	Skiv_18-Q3-R9-52_MAXAC.174	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_Anaerolineales;f_envOPS12;g_UBA12294;s_	tig00000002-10-49810230	2619920	exoA	02452
47	Vibo_18-Q3-R45-57_BATAC.199	${\tt d_Bacteria:p_Proteobacteria:c_Gammaproteobacteria:o_Burkholderiales:f_Rhodocyclaceae:g_Propionivibrio:s$	tig00008044-10-802880	52754	exoB	01877
48	Vibo_18-Q3-R45-57_MAXAC.177	d_Bacteria.p_Bacteroidota.c_Bacteroidia;o_Chitinophagales;t_Chitinophagaceae.g_JJ008;s_	tig00001648-10-5476630	259218	exoB	01175