	flgV	flgXW	flgY
Helicobacter mustelae	folk flhF flhG flgV fliA fliM fliY	flgX flgW	purA fliJ flgY
Helicobacter cetorum	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY
Helicobacter pylori	folk fihF fihG figV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY
Helicobacter acinonychis	folK flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY
Helicobacter suis	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY
Helicobacter felis	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY
Helicobacter bilis	folk flhF // flhG //-flgV fliA fliM fliY	ubiA flgX flgW	flgY
Helicobacter cinaedi	flhF flhG flgV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Helicobacter himalayensis	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Helicobacter hepaticus	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Helicobacter typhlonius	flhF flhG flgV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Helicobacter sp. MIT 01-6242	folk fihF fihG figV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Helicobacter cholecystus	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Helicobacter pullorum	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Helicobacter apodemus	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW	purA fliJ flgY
Wolinella succinogenes	folk flhF flhG flgV fliA fliM fliY mnmA	ubiA flgX flgW	purA fliJ flgY
Campylobacter avium	folk flhF flhG flgV fliA fliM fliY ygdH mnmA	ubiA flgX flgW moaA	purA fliJ flgY
Campylobacter peloridis	folk flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Campylobacter lari	folk flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Campylobacter subantarcticus	folK flhF flhG flgV fliA fliM fliY ygdH mnmA	THE PARTY NAMED IN COLUMN TWO IS NOT THE PARTY NAMED IN COLUMN TWO IS NAMED IN THE PARTY NAMED IN COLUMN TWO IS NAMED IN THE PARTY NAMED IN THE PARTY NAMED IN	purA fliJ flgY DUF507
Campylobacter insulaenigrae	folK flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Campylobacter volucris	folK flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Campylobacter coli	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY DUF507
Campylobacter jejuni	folk fihF fihG figV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY DUF507
Campylobacter hepaticus	folk fihF fihG figV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Campylobacter upsaliensis	folK flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY DUF507
Campylobacter helveticus	folK flhF flhG flgV fliA fliM fliY	ubiA figX figW moaA	purA fliJ flgY DUF507
Campylobacter cuniculorum	folk flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY
Campylobacter lanienae	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA ubiA flgX flgW moaA	purA fliJ flgY DUF507
Campylobacter sp. RM8964 Campylobacter iguaniorum	folk flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY DUF507
Campylobacter fetus	FOIK flhF flhG flgV fliA fliM fliY	ubiA flgX flgW moaA	purA fliJ flgY DUF507
Campylobacter hyointestinalis	FOIK FIRE FIRE FIRE FIRE FIRE FIRE FIRE FIRE	ubiA flgX flgW moaA	purA fliJ flgY DUF507
Campylobacter showae	folk fihF fihG figV fliA fliM fliY folk fihF fihG figV fliA fliM fliY ygdH mnm		purA fliJ flgY DUF507
Campylobacter pinnipediorum		W 10 7 14 1	purA fliJ flgY
Campylobacter concisus			purA fliJ flgY
Campylobacter curvus	folK flhF flhG flgV fliA fliM fliY ygdH mmA folK flhF flhG flgV fliA fliM fliY ygdH mmA		purA fliJ flgY
Campylobacter sputorum	folk fihF fihG figV fliA fliM fliY ygdH mnmA	The second secon	purA fliJ flgY
Campylobacter ureolyticus	folk ygdH mnmA	ubiA h.p. moaA	purA DUF507
Campylobacter gracilis	folK ygdH mnmA	ubiA h.p. moaA	purA DUF507
Campylobacter hominis	folK flhG ygdH mnmA	ubiA h.p. moaA	purA
Sulfurospirillum cavolei	folk flhF flhG flgV fliA fliM fliY ygdH	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfurospirillum sp. SL2-1	folk flhF flhG flgV fliA fliM fliY ygdH	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfurospirillum halorespirans	folk flhF flhG flgV fliA fliM fliY ygdH	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfurospirillum multivorans	folk flhF flhG flgV fliA fliM fliY ygdH	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfurospirillum deleyianum	folk flhF flhG flgV fliA fliM fliY ygdH	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfurospirillum barnesii	folK flhF flhG flgV fliA fliM fliY ygdH	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfuricurvum kujiense	folK flhF flhG flgV fliA fliM fliY ygdH mnmA	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfuricurvum sp. 17-40-25	folk flhF flhG flgV fliA fliM fliY ygdH mnmA	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfuricurvum sp. IAE1	folk flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Sulfuricurvum sp. MLSB	folk flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Sulfurimonas autotrophica	folK fihF fihG figV fliA fliM fliY mnmA	ubiA flgX flgW	purA fliJ flgY DUF507
Sulfurimonas denitrificans*	folk fihF - Tn- fihG figV fliA fliM fliY ygdH mnmA	The second secon	purA fliJ flgY GGDEF DUF507
Sulfurimonas gotlandica	folK flhF flhG flgV fliA fliM fliY ygdH mnmA		purA fliJ flgY DUF507
Nitratifractor salsuginis	folk filhF fily mnmA	ubiA	purA DUF507
Sulfurovum sp. NBC37-1	folk fibE filly mnmA	ubiA	purA DUF507
Sulfurovum lithotrophicum	folk) flihF fliY mnmA	ubiA	purA DUF507
Hydrogenimonas sp. MAG	folk flhF flhG flgV fliA fliM fliY mnmA	ubiA flgX flgW	purApurA fliJ flgY DUF507
Hydrogenimonas thermophila	folk flhF flhG flgV fliA fliM fliY mnmA	ubiA flgX flgW	purA fliJ flgY DUF507
Nitratiruptor sp. SB155-2	folk flhG mnmA	ubiA	purA DUF507
Nitratiruptor tergarcus	folk fibe fibe fibe fibe fibe fibe fibe fibe	ubiA flaX flaWrolM	purA DUF507
Lebetimonas natsushimae	folk fihr fihr figy flia flim fliy glpC	ubiA flgX flgWrpIM	purA fliJ -//-DUF507 h.p. flgY purA fliJ -//-DUF507 h.p. flgY
Lebetimonas sp. JS138	folk fihF fihG figV fliA fliM fliY glpC folk fihF fihG figV fliA fliM fliY glpC	ubiA flgX flgWrpIM ubiA flgX flgWrpIM	
Nautilia profundicola	folk fihF fihG figV fliA fliM fliY glpC folK fihF fihG figV fliA fliM fliY glpC	ubiA flgX flgWrpIM	purA fil/-DUF507 h.p. GGDEF h.p. figY
Nautilia sp. PV-1	folk fihF fihG figV fliA fliM fliY glpC	ubiA flgX flgWrpIM	purA fiiJ - DUF507 h.p. figY purA fiiJ - DUF507 h.p. figY
Cetia pacifica Caminibacter mediatlanticus	folk fihF fihG figV fliA fliM fliY glpC	ubiA flgX flgWrpIM	purA fiiJ -//-DUF507 GGDEF h.p. figY
			"

S8 Fig. The conserved gene order of flgV, flgX and flgY in Campylobacterota genomes. Species highlighted in red are either unflagellated or do not have F3 chemosensory class. Arcobacter species that do not have F3 class and FlgVXY are not shown here due to space limitation.