

Figure S1. The strain 8cVS16^T and 9fVS26 growth evaluation on different media: (1) GVPC, (2) MWY, (3) BCYE Cys+ and (4) Cys-, (5) TSA Blood Agar and (6) Chocolate Enriched Agar.

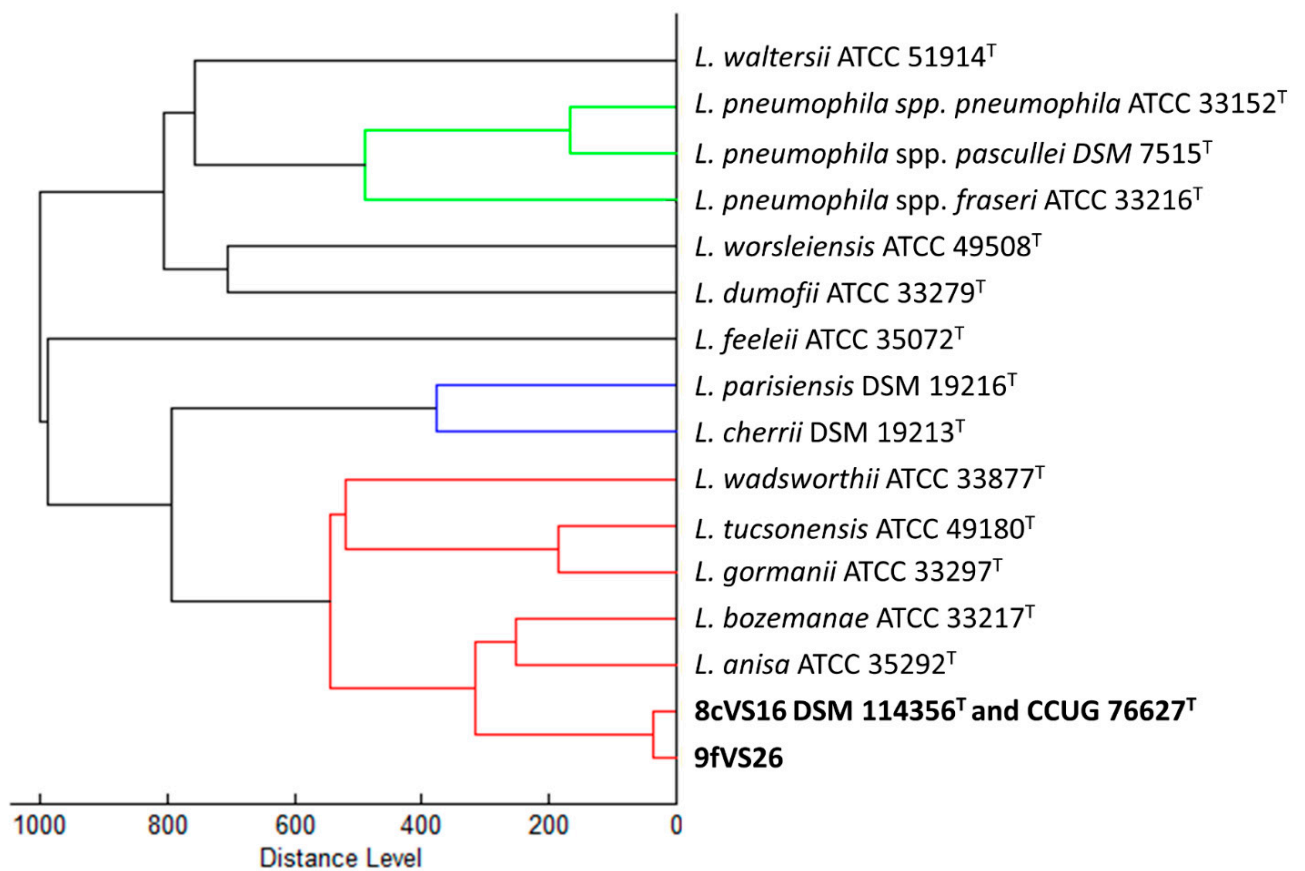


Figure S2. Dendrogram based on whole-cell MALDI-TOF mass spectra for the strains 8cVS16^T and 9fVS26 and *Legionella* reference strains present in instrument database.

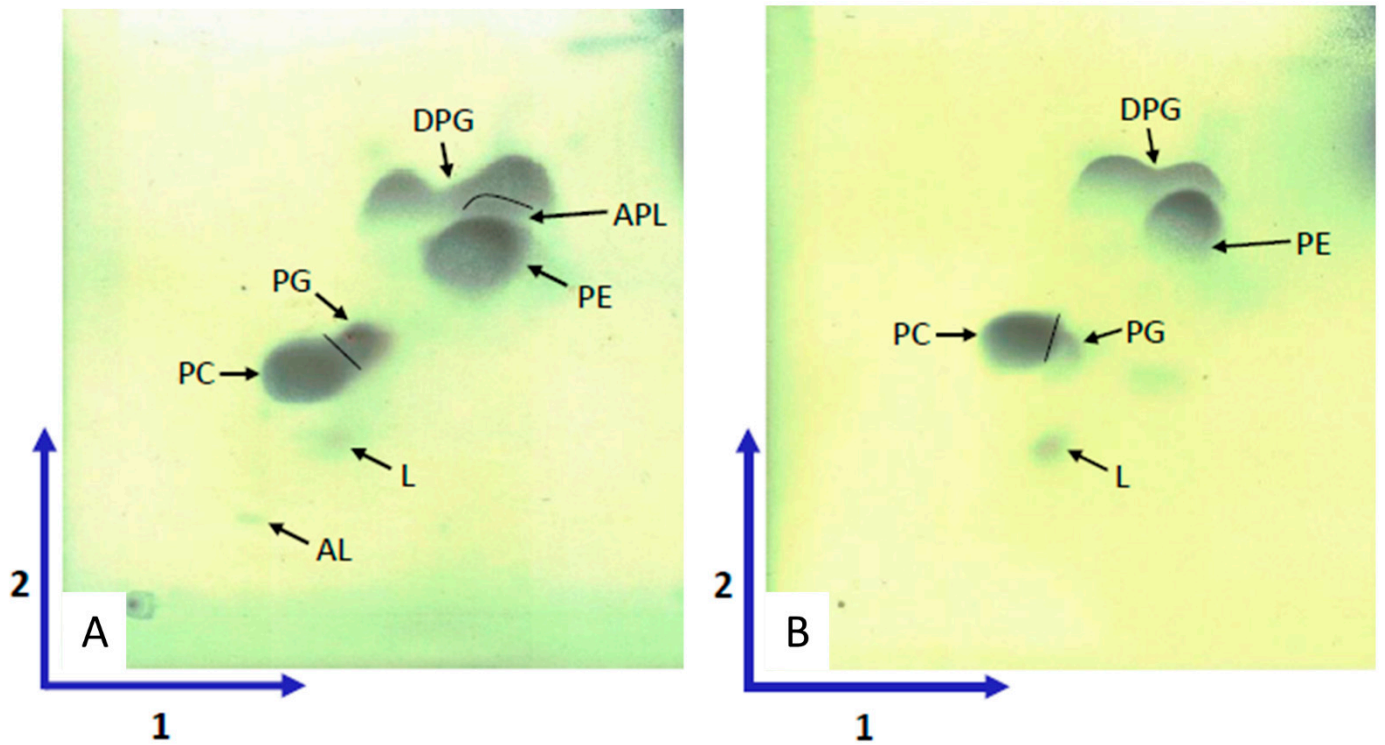


Figure S3. Lipids contents of 8cVS16^T and 9fVS26 (A), and *L. anisa* (DSM 17627^T) (B).

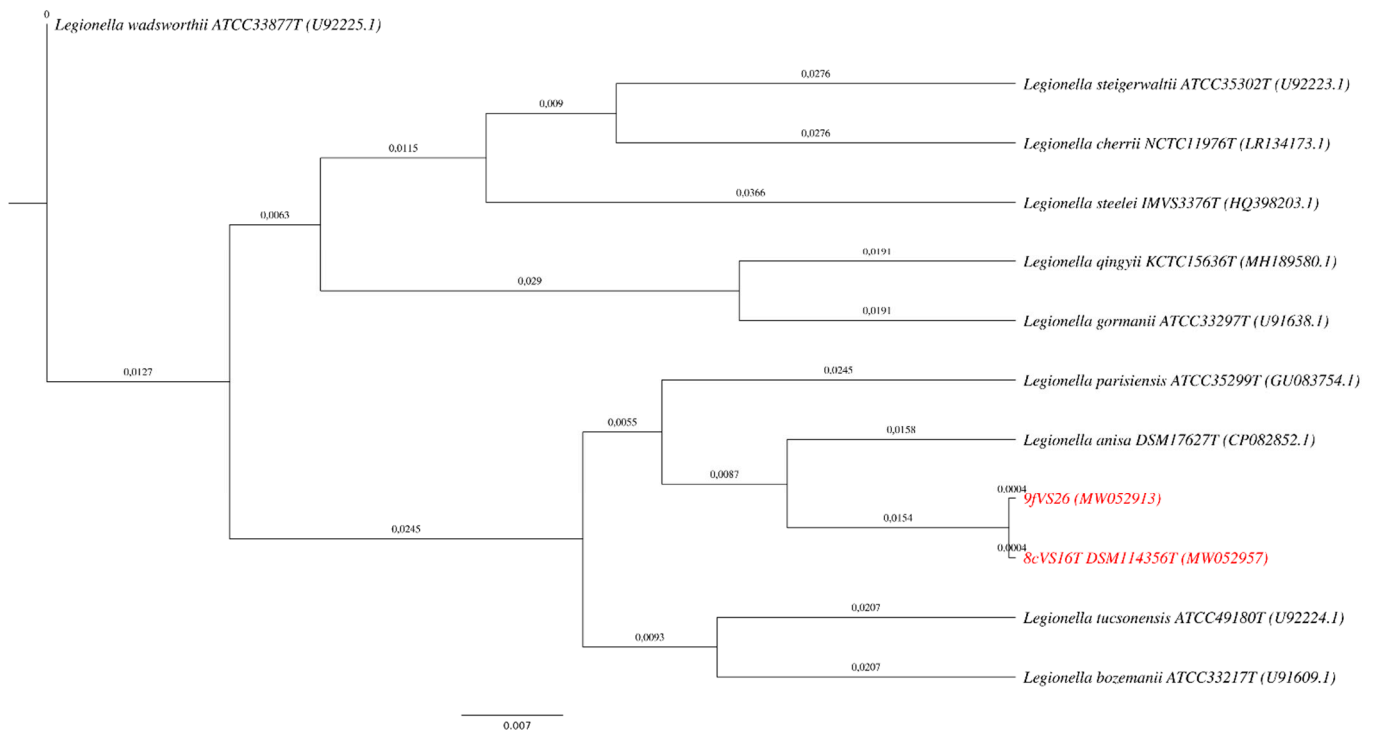


Figure S4. Phylogenetic tree based on *mip* gene of the two strains (8cVS16^T and 9fVS26) and closely related species of the genus *Legionella*. Branch labels show substitutions per site calculated by Bayesian inference using the Markov Chain Monte Carlo (MCMC) method [39,40]. Bar 0.007 substitution per nucleotide position. The strains 8cVS16^T and 9fVS26 are highlighted in red.

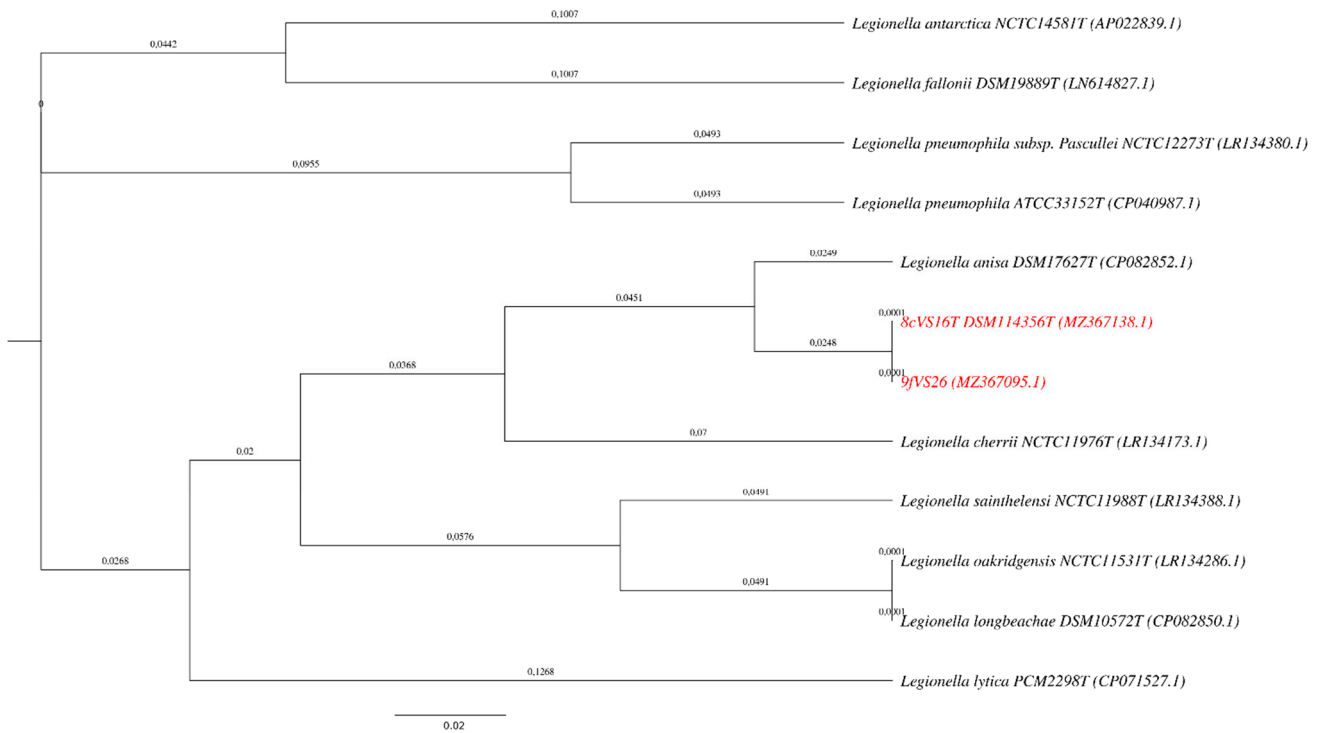


Figure S5. Phylogenetic tree based on *rpoB* gene of the two strains (8cVS16^T and 9fVS26) and closely related species of the genus *Legionella*. Branch labels show substitutions per site calculated by Bayesian inference using the Markov Chain Monte Carlo (MCMC) method [39,40]. Bar 0.02 substitution per nucleotide position. The strain 8cVS16^T and 9fVS26 are highlighted in red.

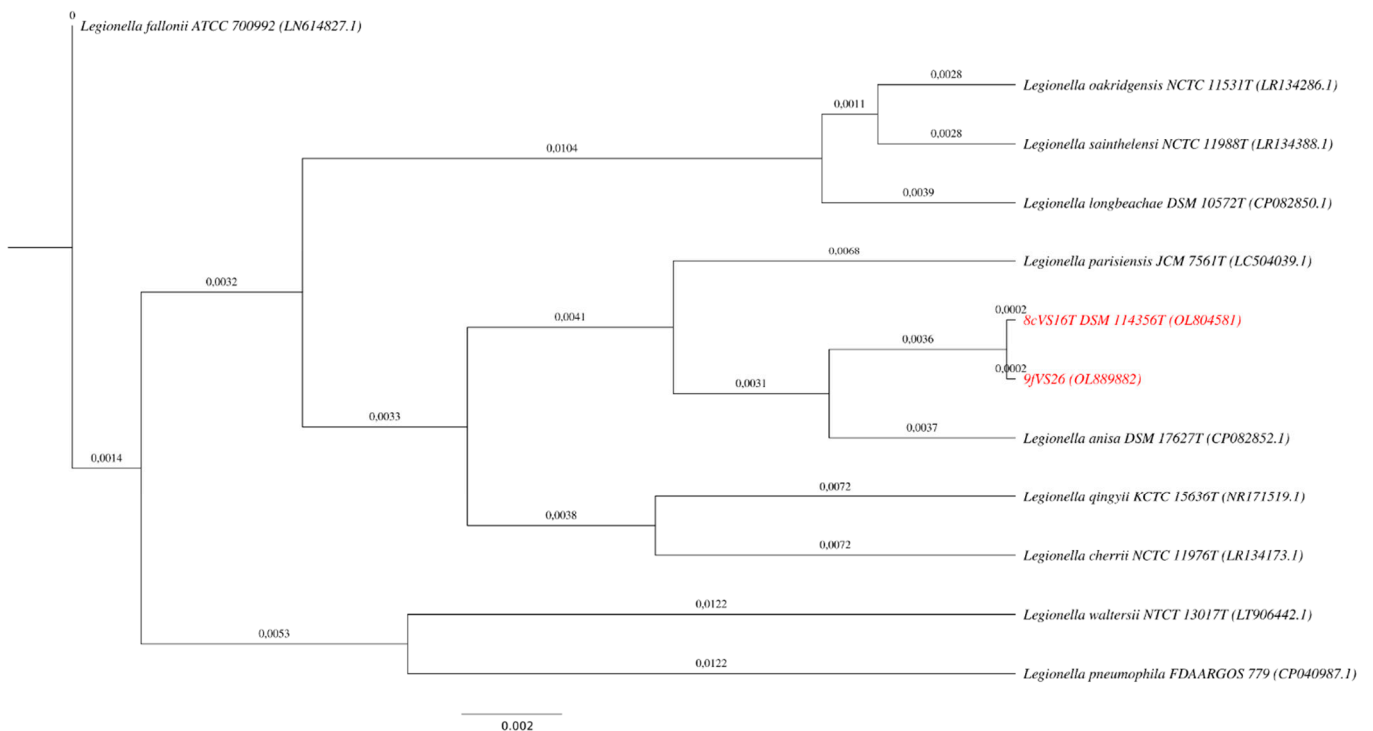


Figure S6. Phylogenetic tree based on 16S rRNA gene of the two strains (8cVS16^T and 9fVS26) and closely related species of the genus *Legionella*. Branch labels show substitutions per site calculated by Bayesian inference using the Markov Chain Monte Carlo (MCMC) method [39,40]. Bar 0.002 substitution per nucleotide position. The strain 8cVS16^T and 9fVS26 are highlighted in red.

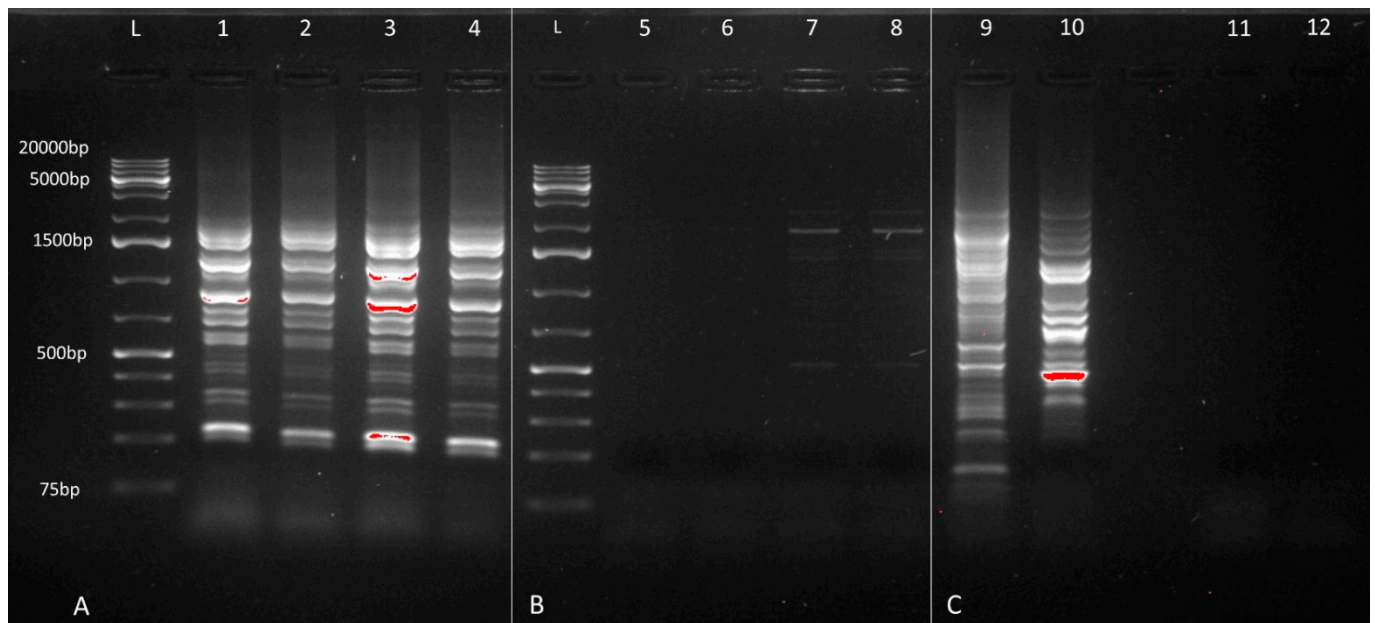


Figure S7. REP-PCR DNA and BOX PCR fingerprinting products for the strains 8cVS16^T (1) and 9fVS26 (2) visualized by electrophoresis gel 2% w/v, to assess the isolates clonality. The gel represents: section **A**, the gene products of both strain amplified by REP primers: lane 1 for 8cVS16^T and 2 for 9fVS26 at DNA concentration of 70 ng; lane 3 for 8cVS16^T and 4 for 9fVS26 as DNA "undiluted"; section **B**, the gene product obtained by BOX primer amplification: lines 5 and 6 for 8cVS16^T and 9fVS26, respectively at a DNA concentration of 70 ng; lines 7 and 8 for 8cVS16^T and 9fVS26 as DNA "undiluted"; section **C**, lane 9 positive (C+) control for REP-PCR, lane 10 positive (C+) control for BOX-PCR, lane 11 negative (C-) control for REP-PCR and lane 12 negative (C-) control for BOX-PCR. Lane "L": reference marker sizes in base pairs (1kb).

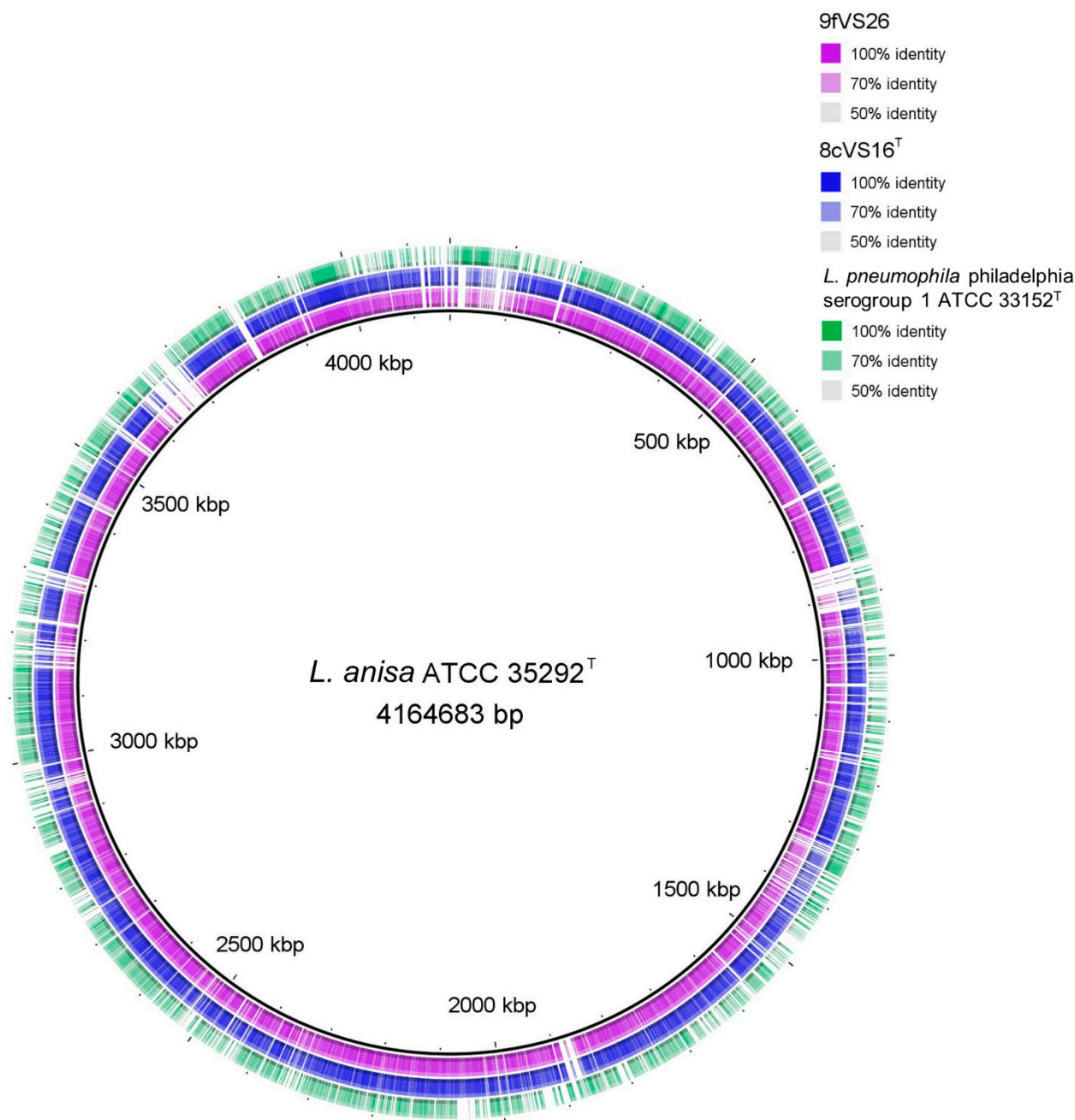


Figure S8. Genome's alignment of *L. anisa* (ATCC 35292^T), 8cVS16^T, 9fVS26 and *Lp1* (ATCC 33152^T), provided by BLAST Ring Image Generator (v. 0.95) software.

Table S1. List of 63 *Legionella* species, plus 8cVS16^T and 9fVS26, utilized for the genome data comparison.

Genome Name	Strain	Culture Collection	Assembly Accession	GenBank Accessions
8cVS16	8cVS16	DSM:114356	GCA_021344005.1	JAJTND000000000.1
9fVS26	9fVS26		GCA_022182285.1	JAJSPM000000000.1
<i>Fluoribacter dumoffii</i>	NY 23	ATCC:33279	GCA_900450695.1	UGGT000000000.1
<i>Fluoribacter gormanii</i>	LS-13	ATCC:33297	GCA_001467685.1	LNVD000000000.1
<i>Legionella adelaidensis</i>	1762-AUS-E	ATCC:49625	GCA_001467055.1	LNKA000000000.1
<i>Legionella anisa</i>	WA-316-C3	ATCC:35292	GCA_900639785.1	CAAAHR000000000.1
<i>Legionella antarctica</i>	TUM19329	NCTC:14581	GCA_011764505.1	AP022839.1
<i>Legionella beliardensis</i>	Montbéliard A1	ATCC:700512	GCA_900452395.1	UGNV000000000.1
<i>Legionella birminghamensis</i>	1407-AL-H	ATCC:43702	GCA_900452515.1	UGNW000000000.1
<i>Legionella bononiensis</i>	30cS62	ATCC:TSD-262	GCA_016786415.1	JADWVN000000000.1

<i>Legionella bozemanæ</i>	WIGA	ATCC:33217	GCA_900640135.1	CAAAY000000000.1
<i>Legionella brunensis</i>	441-1	ATCC:43878	GCA_001467025.1	LNXXV00000000.1
<i>Legionella busanensis</i>	K9951	ATCC:BAA-518	GCA_900461525.1	UGOD00000000.1
<i>Legionella cardiaca</i>	H63	ATCC:BAA-2315	GCA_029026145.1	CP119078.1
<i>Legionella cherrii</i>	ORW	ATCC:35252	GCA_000621385.1	JHYM00000000.1
<i>Legionella cinclinatiensis</i>	72-OH-0	ATCC:43753	GCA_001467545.1	LNXX00000000.1
<i>Legionella drancourtii</i>	LLAP12	ATCC:50991	GCA_000162755.2	ACUL00000000.2
<i>Legionella drozanskii</i>	LLAP-1	ATCC:700990	GCA_900640075.1	CAAAIU000000000.1
<i>Legionella erythra</i>	SE-32A-C8	ATCC:35303	GCA_001467615.1	LNIA00000000.1
<i>Legionella fairfieldensis</i>	1725-AUS-E	ATCC:49588	GCA_900640125.1	CAAAIZ000000000.1
<i>Legionella fallonii</i>	LLAP-10	ATCC:700992	GCA_000953135.1	LN614827.1
<i>Legionella feeleyi</i>	WO-44C	ATCC:35072	GCA_001467625.1	LNBY00000000.1
<i>Legionella geestiana</i>	1308	ATCC:49504	GCA_001467645.1	LNVC00000000.1
<i>Legionella gratiana</i>	Lyon 8420412	ATCC:49413	GCA_001467695.1	LNIE00000000.1
<i>Legionella gresilensis</i>	Gréoux 11 D13	ATCC:700509	GCA_900639865.1	CAAAHX000000000.1
<i>Legionella hackeliae</i>	Lansing 2	ATCC:35250	GCA_000953655.1	LN681225.1
<i>Legionella impletisoli</i>	OA1-1	DSM:18493	GCA_900639875.1	CAAAIA000000000.1
<i>Legionella israelensis</i>	Bercovier 4	ATCC:43119	GCA_004571175.1	CP038273.1
<i>Legionella jamestowniensis</i>	JA-26-G1-E2	DSM:19215	GCA_900114725.1	FOTZ00000000.1
<i>Legionella jordanis</i>	BL-540	NCTC:11533	GCA_900637635.1	LR134383.1
<i>Legionella lansingensis</i>	1677-MI-H	NCTC:12830	GCA_900187355.1	LT906451.1
<i>Legionella londiniensis</i>	1477	ATCC:49505	GCA_900452755.1	UGON00000000.1
<i>Legionella longbeachae</i>	Long Beach 4	ATCC:33462	GCA_004283175.1	RXNW00000000.1
<i>Legionella lytica</i>	L2	PMC:2298	GCA_023921225.1	CP071527.1
<i>Legionella maceachernii</i>	PX-1-G2-E2	ATCC:35300	GCA_900460175.1	UHI000000000.1
<i>Legionella maioricensis</i>	HCPI-6	CCUG:75071	GCA_023618015.1	JAJKBJ000000000.1
<i>Legionella massiliensis</i>	LegA	DSM:24804	GCA_000756815.1	CCVW00000000.1
<i>Legionella moravica</i>	316-86	ATCC:43877	GCA_900452715.1	UGOG00000000.1
<i>Legionella nagasakiensis</i>	CDC-1796-JAP-E	ATCC:BAA-1557	GCA_900639915.1	CAAAID000000000.1
<i>Legionella nautarum</i>	1224	ATCC:49506	GCA_001467895.1	LNIO00000000.1
<i>Legionella norrlandica</i>	LEGN	ATCC:BAA-2678	GCA_000770585.1	JNCF00000000.1
<i>Legionella oakridgensis</i>	Oak Ridge 10	ATCC:33761	GCA_001648605.1	LCUA00000000.1
<i>Legionella parisiensis</i>	PF-209C-C2	ATCC:35299	GCA_900461585.1	UGOH00000000.1
<i>Legionella pneumophila</i>	Philadelphia-1	ATCC:33152	GCA_001941585.1	CP013742.1
<i>Legionella qingyii</i>	km488	KCTC:15636	GCA_003184185.1	QHJG01000001.1
<i>Legionella quateirensis</i>	1335	ATCC:49507	GCA_900452695.1	UGOW00000000.1
<i>Legionella quinlivanii</i>	1442-AUS-E	ATCC:43830	GCA_001467975.1	LNYS00000000.1
<i>Legionella rowbothamii</i>	LLAP6	ATCC:700991	GCA_900639985.1	CAAAIM000000000.1
<i>Legionella rubrilucens</i>	WA-270A-C2	ATCC:35304	GCA_001468125.1	LNIT00000000.1
<i>Legionella sainthelensi</i>	MSH-4	ATCC:35248	GCA_001468105.1	LNIV00000000.1
<i>Legionella santacrucis</i>	SC-63-C7	ATCC:35301	GCA_001468135.1	LNIV00000000.1
<i>Legionella saoudiensis</i>	LS-1	DSM:101682	GCA_001465875.1	CZVG00000000.1
<i>Legionella septentrionalis</i>	km711	KCTC:15655	GCA_003989745.1	RZGS00000000.1
<i>Legionella shakespearei</i>	214	ATCC:49655	GCA_001468025.1	LNIVW00000000.1
<i>Legionella spiritensis</i>	ML76	NCTC:12082	GCA_900637495.1	LR134374.1
<i>Legionella steeleyi</i>	IMVS-3376	ATCC:BAA-2169	GCA_001468005.1	LNIVY00000000.1
<i>Legionella steigerwaltii</i>	SC-18-C9	ATCC:35302	GCA_900452835.1	UGOY00000000.1
<i>Legionella taurinensis</i>	Turin I no 1	ATCC:700508	GCA_900452865.1	UGOZ00000000.1
<i>Legionella tucsonensis</i>	1087-AZ-H	ATCC:49180	GCA_900640035.1	CAAAIP000000000.1
<i>Legionella tunisiensis</i>	LegM	DSM:24805	GCA_000308315.1	CALJ00000000.1
<i>Legionella wadsworthii</i>	Wadsworth 81-716A	ATCC:33877	GCA_900452925.1	UGPB00000000.1
<i>Legionella waltersii</i>	2074-AUS-E	ATCC:51914	GCA_900187095.1	LT906442.1
<i>Legionella worsleiensis</i>	1347	ATCC:49508	GCA_900453045.1	UGPA00000000.1
<i>Legionella yabuuchiæ</i>	OA1-2	DSM:18492	GCA_900640115.1	CAAAIW000000000.1
<i>Tatlockia micdadei</i>	TATLOCK	ATCC:33218	GCA_000953635.1	LN614830.1

Table S2. Cellular fatty acid (CFA) composition of 8cVS16^T, 9fVS26 and *Legionella* most related species: *L. anisa* (DSM 17627^T), *L. bozeman* (ATCC 33217^T), *L. parisiensis* ATCC 35299^T), *L. tucsonensis* (ATCC 40180^T), *L. wadsworthii* (ATCC 33877^T) and *L. pneumophila* subsp. *pneumophila* Philadelphia 1 (ATCC 33152^T). (-), not detected; NA, not available; Tr, traces. The values indicate the percentages of total fatty acids found.

Fatty acid	8cVS16 ^T and 9fVS26	<i>L. anisa</i>	<i>L. bozeman</i> ^a	<i>L. parisiensis</i> ^a	<i>L. tucsonensis</i> ^b	<i>L. wadsworthii</i> ^a	<i>L. pneumophila</i> ^c
Saturated							
C _{14:0}	1.5	0.4					-
C _{15:0}	3.1	1.8					Tr
C _{16:0}	16.3	11.5	11.0	9.0	10.0	6.0	12.0
C _{16:1}					20.0		
C _{17:0}	1.1	2.0			1.0		1.0
C _{18:0}	0.8	1.5	2.0	1.0	1.0	1.0	3.0
C _{19:0}	0.3	0.3	1.0				
C _{20:0}	2.1	0.5	1.0				2.0
Unsaturated							
C _{14:1} ω5c	1.0	0.3					Tr
C _{15:1} ω6c	3.4	2.1					1.5
C _{16:1} ω7c	0.5		9.0			8.0	29.6
C _{16:1} ω11c	1.0			7.0			
Cyclopropane							
C _{16:0} cyclo					1.0		
C _{17:0} cyclo	0.4	0.8	9.0	16.0	7.0	6.0	-
Methyl branched (iso, anteiso)							
C _{15:0} anteiso	14.2	29.2	29.0	23.0	25.0	37.0	9.4
C _{15:1} anteiso A		0.8					
C _{17:0} anteiso	4.4	9.7	11.0	9.0	12.0	19.0	7.4
C _{19:0} anteiso						2.0	
C _{14:0} iso	2.8	2.7	3.0	3.0	2.0	1.0	2.4
C _{15:0} iso	0.5	0.3	tr			Tr	
C _{16:0} iso	17.5	14.7	14.0	17.0	20.0	10.0	23.4
C _{17:0} iso	0.5	0.6	1.0	1.0		1.0	
C _{18:0} iso	0.2	0.2					
Branched-chain hydroxy							
C _{14:0} iso 3OH	0.5				2.0		Tr
C _{15:0} iso 2OH	-				1.0		-
C _{16:0} iso 3OH		0.1			13.0		
Summed features							
2 (C _{16:1} iso I/ C _{14:0} 3OH)	0.2	0.1					
3 (C _{16:1} ω7c/C _{16:1} ω6 c)	27.7	20.5					

Except for 8cVS16^T, 9fVS26 and *L. anisa* (DSM17627^T), the strains information was obtained from literature: ^aLambert and Moss, 1988 [27] ^bThacker et al., 1989 [28]; ^cCrespi et al., 2023 [26].

Table S3. Ubiquinones contents of 8cVS16^T, 9fVS26, *Legionella* most related species and *Lp1*^a.

Species ^b	Accession number	Q-9	Q-10	Q-11	Q-12	Q-13	Q-14	Q-15
8cVS16 ^T and 9fVS26	DSM 114356 ^T			0.70%		50.20%	39.60%	1.20%
<i>L. anisa</i>	DSM 17627 ^T	12.60%	33.00%	24.20%	26.90%	2.90%	0.40%	
<i>L. bozeman</i>	ATCC 33217 ^T	2-3	4	3-4	4	tr-1	-	
<i>L. parisiensis</i>	ATCC 35299 ^T	1-2	3-4	3	4	1	-	
<i>L. tucsonensis</i>	ATCC 40180 ^T				NA			
<i>L. wadsworthii</i>	ATCC 33877 ^T	2	4	2-3	tr-1	-	-	
<i>L. pneumophila</i>	ATCC 33152 ^T	-	-	1-2	4	1-2	-	

^aThe numbers indicate the visual estimates of the relative amounts of ubiquinone with the major component labeled as 4; 2, half the amount of 4; 1, half that of 2; -, not detected; NA, not available; tr, traces. Differences between strains within a species are indicated by ranges. ^b Except 8cVS16^T, 9fVS26 and *L. anisa*, the strains information was obtained from Lambert et al. 1988 [27].

Table S4. Comparison among 8cVS16^T and 9fVS26 strains, *L. anisa* (ATCC 35292^T) and *L. pneumophila philadelphia* Serogroup 1 (ATCC 33152^T): list of missing genes.

Genome comparison	Total number of annotated genes	List of missing genes in shorter genome
9fVS26 vs 8cVS16 ^T	1596 vs 1595	<p>9fVS26 genes not found in 8cVS16: <i>esiB_1, esiB_2</i></p> <p>8cVS16 genes not found in 9fVS26: <i>esiB</i></p> <p>8cVS16 genes not found in <i>L. anisa</i>: <i>murU_1, murU_2, sdh, psuK, mdtK, pepA, alx_1, glaR, potA, potB, potD, nat, glsA1, ackA, ytcD, ycdF, tolB_1, cbpD, rssB_1, ypeA, aacA4_1, rssB_2, yhcG, hin, kmo_1, aatB_1, purE, cheW, cheR1, cybA_1, nprV, rcsB, cph1, dauR, atpC, atpD, atpG, atpA, atpF, atpB, recF, cbs, panD, guaC, hldD, cspC, rocG_1, ybaB_1, mhqR, petC_1, petC_2, sspA, ydgA, hrp1_1, ligd, sufS, algC, doeB, rhtC_1, kmo_2, yhaJ, aspC, adhT, cadI_1, nhaP, asnB, treA, gloB_1, pafA_1, rcsA, ctpF, uspE_1, nhaA, acr3, arsC, cadI_2, nfdA, ycaC_1, dnaG_1, bioC, phrA, lolE, ldh, pagN, dps2_1, motA, adc_1, aacA4_2, tdcD, rocG_2, yhjQ, ftsP_1, yhhT, aatB_2, cysC, pcp, panE, hspA, alkA, mtmX, gshA, ykfA_3, dhaA_1, argP, hutG, lcfB_1, pdaC, ycaC_2, ftsI, gtaB, yhjR, bcsQ, yabJ_1, ybaB_2, tadA_1, gltP_1, lexA, ligD, ku_1, aacA4_3, doxA, yrbG, hoxH, asrB, ndhI, hypE, hypD, hypC, hypF, hypB, nixA, uspE_2, pacL, auaG, nqrF, cybA_2, bepA, fabI_4, pafA_2, macA, fcl, pds, arnC_3, rfbC, garP, recB, dprE1, udk_3, qseC, gloB_2, emrA_1, yyaP_1, clcA_3, lacG, guaB, tadA_2, mscS, yyaP_2, ybaB_3, htrA, hpf_1, ydaD, tolB_2, derI, yveA, ibpA, glpE, ftsP_2, pah, hrp1_2, sthA, ynjF, yabJ_2, dadA, bioD1, bioH_1, cmk, thiK, fabH, esiB, dnaG_2, intA, dhaA_2, golD, bioH_2, pksC, xerC, gsbB, gbpA, atm1, aaeB, korB, atoC_3, dauA, ampG_1, tam_3, gdhA, alx_2, rlpA_3, malT, adc_2, ankX, arcB_3, lcfB_2, todT_3, phaB_5, ampG_2, spxA, gltP_2, kdpB_4, sasA_10, ku_2, rcsC_6, mnaT, csdA, vldW, carA_5, arnC_4, yceF, dps2_2, lcfB_3, rhtC_2, hpf_2, ahpD, sasA_11, hemH, csbC, edd, pgl, gadC_4, ybhR_1, btuD_3, ybhR_2, emrA_2, sadH, lemA, oprM_5, oprM_6, murU_3</i></p> <p><i>L. anisa</i> genes not found in 8cVS16: <i>catD_1, malT_1, ackA_1, xpkA_1, atpD_1, atpC_1, atpB_1, atpF_1, atpA_1, atpG_1, ftsP, esiB_1, cusA, cusB, lexA_1, cpbD_1, xerC_1, xerC_2, xerC_3, xerC_4, yhaJ_1, kmo, ygiD, algC_1, ldh_1, sufS_1, sspB, sspA_1, petC, petA, hemX, ybaB, rocG, fcl_1, guaB_1, yhaJ_2, panD_1, cysK, recF_1, osmY, atpB_2, atpF_2, atpH_3, atpA_2, atpG_2, atpD_2, atpC_2, glpQ, catD_2, cmpR, tagH, epsL, epsM, per, mhpC, mta, cybA, traM_1, traL_1, traK_1, traJ_1, traI_1, traG_1, virB4_1, lexA_2, egtB_1, egtB_2, gshA_1, hemH_1, purK_1, purE_1, ndhB_1, gltR, apxIB_1, edd_1, glsA1_1, bioD1_1, phrA_1, crtK-2, phrB, ufaA1, purK_2, purE_2, ndhB_2, apxIB_2, panD_2, ddl, ygeA, mdrP, riza, xpkA_2, aacA4, lon2, ephD, bcr, rimL, paaK, sufS_2, glaH, gshA_2, livK, rssB, csbC_1, kdnA, neoG, csbC_2, yveA_1, ohrA, adh, cda, cspV, dnaG, lolE_1, ldh_2, dps2, motA_1, recF_2, xerC_5, xerD_1, xerD_2, wecD_1, csrA_3, thiK_1, desA, baeB, baeC_1, novP, lolE_2, hin_1, lexA_3, aatB, cmk_1, yofA, glaR_1, fixL, cheB_3, ibpA_1, serA, xerD_3, xerD_4, xerC_6, gshA_3, rimJ, dhaA, srkA_3, ttuB, hutG_1, lcfB, htrA_1, ycaC, ftsI_1, gtaB_1, yabJ, mmcO, motA_2, xerC_7, xerD_5, xerD_6, xerC_8, xerD_7, xerD_8, ahpD_1, argT, bepA_1, pafA, pgl_1, spsI, fcl_2, dadA_1, mshA_3, rmlC, gudP, addA, dprE1_1, motB_3, tylM1, mltD, gloB, emrA, yyaP, fadA_3, add, araQ, guaB_2, tadA, gltC, hchA, cyfB, cspA_3, tolB, dltA_3, rpiB, yveA_2, ibpA_2, copB, copA_3, hutG_2, hrp1, thi4, slrP, dadA_2, yajO, bioD1_2, bioH, cmk_2, thiK_2, oprB, fabH_1, esiB_2, baeC_2, xerC_9, dgt, gsta, bioD1_3, glsA1_2, edd_2, besD, ccmH, dauA_1, ampG, sfp, csrA_4, dtpA_4, pal_3, dauA_2, phrA_2, ibpB, htrA_2, spkD, dprE1_2, malT_2, prs_3, cadA, adc, sspA_2, intS_3, csrA_5, celA, gtaB_2, algC_2, wbiB, bepA_2, galE1, ywqF, yfcJ, rayT, yfgD, gltP, ligD_1, ligD_2, ku, mshD_3, tycC, maf, lexA_4, mrgA, hin_2, dltA_4, fabG_6, mepM, spmB, spmA, pepA_1, holC, pepA_2, murJ, rpsT, uvrC, gacA, phhA, cinA, obg, rpmA, rplU, rplY, pth, ychF, ispB, cpbD_2, proP_6, esiB_3, traM_2, traL_2, traK_2, traJ_2, traI_2, traD, traG_2, virB4_2, csrA_6, xerC_10, ftsI_2, mecl, thrB, rhtC, hpf, smc_6, secA_3, ahpD_2, wecD_2, hemH_2, ppaX, csbC_3, edd_3, pgl_2, fabH_2, oleD, ahlD, ttgC, acpP_5, murU, ydfG, pepA_3, alx, frsA, glaR_2, tmoT, fosB, glsA, ackA_2, srfAB</i></p>
8cVS16 ^T vs <i>L. anisa</i>	1595 vs 1677	<p>9fVS26 genes not found in <i>L. anisa</i>: <i>murU_1, murU_2, sdh, psuK, mdtK, pepA, alx_1, glaR, potA, potB, potD, nat, glsA1, ackA, ytcD, ycdF, tolB_1, cbpD, rssB_1, ypeA, aacA4_1, rssB_2, yhcG, hin, kmo_1, aatB_1, purE, cheW, cheR1, cybA_1, nprV, rcsB, cph1, dauR, atpC, atpD, atpG, atpA, atpF, atpB, recF, cbs, panD, guaC, hldD, cspC, rocG_1, ybaB_1, rhtC_1, hpf_1, ahpD, hemH, csbC, edd, pgl, ybhR_1, ybhR_2, emrA_1, sadH, lemA, murU_3, mhqR, petC_1, petC_2, sspA, ydgA, hrp1_1, ligd, sufS, algC, doeB, rhtC_2, kmo_2, yhaJ, aspC, adhT, cadI_1, nhaP, asnB, treA, gloB_1, pafA_1, rcsA, ctpF, uspE_1, nhaA, acr3, arsC, cadI_2, nfdA, ycaC_1, dnaG_1, bioC, phrA, lolE, ldh, pagN, dps2_1, motA, adc_1, aacA4_2, tdcD, rocG_2, yhjQ, ftsP_1, yhhT, aatB_2, cysC, pcp, panE, hspA, alkA, mtmX, gshA, ykfA_3, dhaA_1, argP, hutG, lcfB_1, pdaC, ycaC_2, ftsI, gtaB, yhjR, bcsQ, yabJ_1, ybaB_2, tadA_1, gltP_1, lexA, ligD, ku_1, aacA4_3, doxA, yrbG, hoxH, asrB, ndhI, hypE, hypD, hypC, hypF, hypB, nixA, uspE_2, pacL, auaG, nqrF, cybA_2, bepA, fabI_4, pafA_2, macA, fcl, pds, btuD_3, arnC_3, rfbC, garP, recB, dprE1, udk_3, qseC, gloB_2, emrA_2, oprM_5, yyaP_1, clcA_3, lacG, guaB, tadA_2, mscS, yyaP_2, ybaB_3, htrA, hpf_2, ydaD, tolB_2, derI, yveA, ibpA, glpE, ftsP_2, pah, hrp1_2, sthA, ynjF, yabJ_2, dadA, bioD1, bioH_1, cmk, thiK, fabH, dnaG_2, intA, dhaA_2, golD, bioH_2, pksC, xerC, sasA_10, gsbB, gadC_4, gbpA, atm1, aaeB, korB, atoC_3, dauA, ampG_1, tam_3,</i></p>
9fVS26 vs <i>L. anisa</i>	1596 vs 1677	<p>9fVS26 genes not found in <i>L. anisa</i>: <i>murU_1, murU_2, sdh, psuK, mdtK, pepA, alx_1, glaR, potA, potB, potD, nat, glsA1, ackA, ytcD, ycdF, tolB_1, cbpD, rssB_1, ypeA, aacA4_1, rssB_2, yhcG, hin, kmo_1, aatB_1, purE, cheW, cheR1, cybA_1, nprV, rcsB, cph1, dauR, atpC, atpD, atpG, atpA, atpF, atpB, recF, cbs, panD, guaC, hldD, cspC, rocG_1, ybaB_1, rhtC_1, hpf_1, ahpD, hemH, csbC, edd, pgl, ybhR_1, ybhR_2, emrA_1, sadH, lemA, murU_3, mhqR, petC_1, petC_2, sspA, ydgA, hrp1_1, ligd, sufS, algC, doeB, rhtC_2, kmo_2, yhaJ, aspC, adhT, cadI_1, nhaP, asnB, treA, gloB_1, pafA_1, rcsA, ctpF, uspE_1, nhaA, acr3, arsC, cadI_2, nfdA, ycaC_1, dnaG_1, bioC, phrA, lolE, ldh, pagN, dps2_1, motA, adc_1, aacA4_2, tdcD, rocG_2, yhjQ, ftsP_1, yhhT, aatB_2, cysC, pcp, panE, hspA, alkA, mtmX, gshA, ykfA_3, dhaA_1, argP, hutG, lcfB_1, pdaC, ycaC_2, ftsI, gtaB, yhjR, bcsQ, yabJ_1, ybaB_2, tadA_1, gltP_1, lexA, ligD, ku_1, aacA4_3, doxA, yrbG, hoxH, asrB, ndhI, hypE, hypD, hypC, hypF, hypB, nixA, uspE_2, pacL, auaG, nqrF, cybA_2, bepA, fabI_4, pafA_2, macA, fcl, pds, btuD_3, arnC_3, rfbC, garP, recB, dprE1, udk_3, qseC, gloB_2, emrA_2, oprM_5, yyaP_1, clcA_3, lacG, guaB, tadA_2, mscS, yyaP_2, ybaB_3, htrA, hpf_2, ydaD, tolB_2, derI, yveA, ibpA, glpE, ftsP_2, pah, hrp1_2, sthA, ynjF, yabJ_2, dadA, bioD1, bioH_1, cmk, thiK, fabH, dnaG_2, intA, dhaA_2, golD, bioH_2, pksC, xerC, sasA_10, gsbB, gadC_4, gbpA, atm1, aaeB, korB, atoC_3, dauA, ampG_1, tam_3,</i></p>

gdhA, *alx*_2, *rlpA*_3, *malT*, *adc*_2, *ankX*, *arcB*_3, *lcfB*_2, *oprM*_6, *todT*_3, *phaB*_5, *ampG*_2, *spxA*, *gltP*_2, *kdpB*_4, *sasA*_11, *ku*_2, *rcsC*_6, *mnaT*, *csdA*, *vlwW*, *carA*_5, *arnC*_4, *yceF*, *dps2*_2, *lcfB*_3

***L. anisa* genes not found in 9fVS26:** *catD*_1, *malT*_1, *ackA*_1, *xpkA*_1, *atpD*_1, *atpC*_1, *atpB*_1, *atpF*_1, *atpA*_1, *atpG*_1, *ftsP*, *cusA*, *cusB*, *lexA*_1, *cpbD*_1, *xerC*_1, *xerC*_2, *xerC*_3, *xerC*_4, *yhaJ*_1, *kmo*, *ygiD*, *algC*_1, *ldh*_1, *sufS*_1, *sspB*, *sspA*_1, *petC*, *petA*, *hemX*, *ybaB*, *rocG*, *fcl*_1, *guaB*_1, *yhaJ*_2, *panD*_1, *cysK*, *recF*_1, *osmY*, *atpB*_2, *atpF*_2, *atpH*_3, *atpA*_2, *atpG*_2, *atpD*_2, *atpC*_2, *glpQ*, *catD*_2, *cmpR*, *tagH*, *epsL*, *epsM*, *per*, *mhpC*, *mta*, *cyaB*, *traM*_1, *traL*_1, *traK*_1, *traJ*_1, *traI*_1, *traG*_1, *virB4*_1, *lexA*_2, *egtB*_1, *egtB*_2, *gshA*_1, *hemH*_1, *purK*_1, *purE*_1, *ndhB*_1, *gltR*, *apxIB*_1, *edd*_1, *glsA1*_1, *bioD1*_1, *phrA*_1, *crtK*-2, *phrB*, *ufaA1*, *purK*_2, *purE*_2, *ndhB*_2, *apxIB*_2, *panD*_2, *ddl*, *ygeA*, *mdrP*, *riza*, *xpkA*_2, *aacA4*, *lon2*, *ephD*, *bcr*, *rimL*, *paaK*, *sufS*_2, *glaH*, *gshA*_2, *livK*, *rssB*, *csbC*_1, *kdnA*, *neoG*, *csbC*_2, *yveA*_1, *ohrA*, *adh*, *cda*, *csfV*, *dnaG*, *lolE*_1, *ldh*_2, *dps2*, *motA*_1, *recF*_2, *xerC*_5, *xerD*_1, *xerD*_2, *wecD*_1, *csrA*_3, *thiK*_1, *desA*, *baeB*, *baeC*_1, *novP*, *lolE*_2, *hin*_1, *lexA*_3, *aatB*, *cmk*_1, *yofA*, *glaR*_1, *fixL*, *cheB*_3, *ibpA*_1, *serA*, *xerD*_3, *xerD*_4, *xerC*_6, *gshA*_3, *rimJ*, *dhaA*, *srkA*_3, *ttuB*, *hutG*_1, *lcfB*, *htrA*_1, *ycac*, *ftsI*_1, *gtaB*_1, *yabJ*, *mmcO*, *motA*_2, *xerC*_7, *xerD*_5, *xerD*_6, *xerC*_8, *xerD*_7, *xerD*_8, *ahpD*_1, *argT*, *bepA*_1, *paqA*, *pgl*_1, *spL*, *fcl*_2, *dadA*_1, *mshA*_3, *rmlC*, *gudP*, *addA*, *dprE1*_1, *motB*_3, *tylM1*, *mltD*, *gloB*, *emrA*, *yyaP*, *fadA*_3, *add*, *araQ*, *guaB*_2, *tadA*, *gltC*, *hchA*, *cvfB*, *csfA*_3, *tolB*, *dltA*_3, *rpiB*, *yveA*_2, *ibpA*_2, *copB*, *copA*_3, *hutG*_2, *hrp1*, *thi4*, *slrP*, *dadA*_2, *yajO*, *bioD1*_2, *bioH*, *cmk*_2, *thiK*_2, *oprB*, *fabH*_1, *baeC*_2, *xerC*_9, *dgt*, *gstA*, *bioD1*_3, *glsA1*_2, *edd*_2, *besD*, *ccmH*, *dauA*_1, *ampG*, *sfp*, *csrA*_4, *dtpA*_4, *pal*_3, *dauA*_2, *phrA*_2, *ibpB*, *htrA*_2, *spkD*, *dprE1*_2, *malT*_2, *prs*_3, *cadA*, *adc*, *sspA*_2, *intS*_3, *csrA*_5, *celA*, *gtaB*_2, *algC*_2, *wbiB*, *bepA*_2, *galE1*, *ywqF*, *yfcJ*, *rayT*, *yfgD*, *gltP*, *ligD*_1, *ligD*_2, *ku*, *mshD*_3, *tycC*, *maf*, *lexA*_4, *mrgA*, *hin*_2, *dltA*_4, *fabG*_6, *mepM*, *spmB*, *spmA*, *pepA*_1, *holC*, *pepA*_2, *murJ*, *rpsT*, *uvrC*, *gacA*, *phhA*, *cinA*, *obg*, *rpmA*, *rplU*, *rplY*, *pth*, *ychF*, *ispB*, *cpbD*_2, *proP*_6, *esiB*_3, *traM*_2, *traL*_2, *traK*_2, *traJ*_2, *traI*_2, *traD*, *traG*_2, *virB4*_2, *csrA*_6, *xerC*_10, *ftsI*_2, *mecI*, *thrB*, *rhtC*, *hpf*, *smc*_6, *secA*_3, *ahpD*_2, *wecD*_2, *hemH*_2, *ppaX*, *csbC*_3, *edd*_3, *pgl*_2, *fabH*_2, *oleD*, *ahlD*, *ttgC*, *acpP*_5, *murU*, *ydfG*, *pepA*_3, *alx*, *frsA*, *glaR*_2, *tmoT*, *fosB*, *glsA*, *ackA*_2, *srfAB*

8cVS16 genes not found in *L. pneumophila* SG1: *murU*_1, *murU*_2, *chrA*, *ykfA*_1, *sdh*, *leuC*, *psuK*, *ybhF*, *ttgI*_1, *gpx1*, *hit*, *mdtK*, *pepA*, *alx*_1, *iucD*, *glaR*, *todT*_1, *yecN*, *per1*, *nat*, *budB*, *gabD*_1, *glsA1*, *ykfA*_2, *fabI*_1, *yacG*, *yteD*, *ycdF*, *xylE*, *tolB*_1, *cbpD*, *rssB*_1, *divK*, *gatA*_1, *ypeA*, *oatA*_1, *fdhA*, *argE*_1, *yffB*, *aacA4*_1, *hss*_1, *rssB*_2, *chaB*, *yfiC*, *MENG*, *yhcG*, *desA3*, *kmo*_1, *aatB*_1, *gap*, *cheW*, *cheR1*, *cheB*_1, *cyaB*_1, *gpmA*, *nprV*, *rcsB*, *rcp1*_1, *rcp1*_2, *cph1*, *dauR*, *tdcB*, *resA*_1, *fadI*, *arcB*_1, *proC*_1, *bepG*, *atpC*, *atpD*, *atpG*, *atpA*, *atpF*, *atpB*, *yidD*, *resA*_2, *hap*, *yhdE*, *msrA*, *aroK*_1, *parA*, *ybgC*_1, *algA*_1, *rna*, *clcA*_1, *oatA*_2, *wbpI*, *capD*, *rmlD*_1, *wecA*, *hldD*, *wzxE*, *chrR*, *csfC*, *rocG*_1, *hinT*, *ybaB*_1, *cca*_1, *czcD*_1, *mhqR*, *petC*_1, *petC*_2, *amiC*_1, *yggR*, *dltA*_1, *ydgA*, *hrp1*_1, *ligd*, *cheB*_2, *cmdF*, *clcA*_2, *doeB*, *dltA*_2, *pknD*_1, *dgkA*, *rhtC*_1, *tcmN*, *kmo*_2, *nudC*_1, *tetA*, *czcD*_2, *slyA*_1, *nhaK*, *fmdA*, *adhT*, *dapL*, *cadI*_1, *nhaP*, *slyA*_2, *asnB*, *treA*, *gloB*_1, *paqA*_1, *rcsA*, *ctfP*, *uspE*_1, *nhaA*, *acr3*, *arsC*, *cadI*_2, *nfdA*, *ycac*_1, *dnaG*_1, *mdh*_1, *mmpA*, *bioC*, *mshA*_1, *rspB*, *ribBA*_1, *pagN*, *dps2*_1, *adc*_1, *bcd*, *aacA4*_2, *phaB*_4, *fabI*_2, *fabI*_3, *tdcD*, *rocG*_2, *hmp*_1, *yhjQ*, *ftsP*_1, *intS*_1, *psdht*, *yhhT*, *aatB*_2, *cysC*, *yfeW*_1, *pcp*, *greB*, *sasA*_4, *rstA*, *rihA*, *panE*, *hdjR*, *nanT*_1, *phnY*, *phnZ*, *gamA*, *asnC*, *asnA*, *cidA*, *cynR*, *dgda*, *csfA*_1, *sasA*_5, *todT*_2, *sasA*_6, *hspA*, *rhaS*, *alkA*, *pdxB*_1, *mtnX*, *ftsH4*, *dhpH*, *rutB*, *fbiB*_1, *ykfA*_3, *speE*_3, *inhA*, *arnC*_1, *guaD*, *tqsA*, *dhaA*_1, *dbpA*_1, *cysZ*, *pnoA*, *tdh*, *lcfB*_1, *pcpR*, *alr*, *dapE*, *dapD*_1, *ycac*_2, *ftsI*, *pdxB*_2, *pmdD*, *kimA*, *fixB*, *aroK*_2, *proC*_2, *bcsG*, *bcsC*, *gtaB*, *yhjR*, *bcsQ*, *bcsA*, *bcsB*, *bcsZ*, *yabJ*_1, *thiS*, *moeZ*, *ybaB*_2, *tadA*_1, *intS*_2, *gltP*_1, *lexA*, *umuC*, *ligD*, *ku*_1, *aacA4*_3, *dox*, *srpC*, *fbiB*_2, *kdpB*_3, *uspE*_2, *pacL*, *atl*, *auaG*, *nqrF*, *cyaB*_2, *sasA*_7, *arl1*, *cmoA*, *thiM*, *menI*, *aes*, *nanT*_2, *norM*, *ribBA*_2, *fabI*_4, *paqA*_2, *acdA*, *bioF*_1, *yghO*, *pimA*, *ttgF*, *tagG*, *fcl*, *gmd*_1, *algA*_2, *rjbG*, *rjbF*, *pds*, *patA*, *gmd*_2, *arnC*_2, *mshA*_2, *arnC*_3, *rmlD*_2, *rffH*, *lysA*_1, *recB*, *lysA*_2, *mdh*_2, *flhB*, *flhA*_1, *lysS*, *cpoB*_1, *gloB*_2, *farB*, *emrA*_1, *yyaP*_1, *degQ*, *gabD*_2, *sufA*, *gata*_2, *artP*_1, *clcA*_3, *ppsC*, *tadA*_2, *mscS*, *yyaP*_2, *fusA*_1, *appB*, *ttgI*_2, *ybaB*_3, *hpf*_1, *ybiT*, *csfA*_2, *pknD*_2, *ydaD*, *csrA2*, *sdhE*, *rpoE*, *ybgC*_2, *tolB*_2, *bamB*_1, *derI*, *yveA*, *dacB*, *adiC*, *ibpA*, *glpE*, *ftsP*_2, *yvgN*, *pah*, *hrp1*_2, *csd*, *yjiG*, *sthA*, *ynjF*, *COQ3*_3, *yabJ*_2, *menH*_3, *dadA*, *FCS1*, *amiC*_2, *rcsC*_4, *carA*_3, *ydjP*, *cpg2*_1, *speE*_4, *bioD1*, *bioH*_1, *bioF*_2, *pdeG*, *secA*_1, *dacC*_1, *ybeZ*, *sasA*_8, *lapB*, *fabG*_3, *fabH*, *lpxB*, *esiB*, *dnaG*_2, *intA*, *dhaA*_2, *nhaP2*, *golD*, *bioH*_2, *kynu*, *yybR*, *potE*, *erg*, *pksC*, *hisH*, *hisF*, *kup*, *xerC*, *dacC*_2, *secA*_2, *mtfA*, *sasA*_9, *mmpL3*, *hmp*_2, *menH*_4, *gbpA*, *rbn*_1, *alkB2*, *carA*_4, *cca*_2, *slyA*_3, *kata*, *atm1*, *yijE*, *hipA*, *aaeB*, *aaeA*, *hisC*_3, *rhaR*, *atoC*_3, *thiD*, *dauA*, *ampG*_1, *cpoB*_2, *gdhA*, *alx*_2, *rlpA*_3, *pbpE*, *dbpA*_2, *capB*_3, *rcsC*_5, *lgrD*, *malT*, *bamB*_2, *adc*_2, *artP*_2, *argF*, *ybaA*, *arcB*_2, *flp*, *arcB*_3, *argE*_2, *lcfB*_2, *lrp*, *todT*_3, *phaB*_5, *ampG*_2, *caiA*, *spxA*, *gltP*_2, *kdpA*, *kdpB*_4, *kdpC*, *kdpD*, *flhA*_2, *fabG*_4, *sasA*_10, *rcp1*_3, *ku*_2, *aldH1*, *rcsC*_6, *cpg2*_2, *selO*, *mnaT*, *sodC1*, *csdA*, *vlwW*, *ahcY*_3, *carA*_5, *aroH*, *arnC*_4, *decR*, *iaaA*, *cphB*, *ybaL*, *yfeW*_2, *dipZ*, *madD*, *ndh*, *lysP*, *proP*_5, *dam*, *sauU*_3, *dps2*_2, *nanT*_3, *arnT*, *ctb*, *cydB*, *dapD*_2, *lcfB*_3, *dltC*, *fabG*_5, *nphT7*, *emrD*_1, *cpdA*_3, *aroK*_3, *hss*_2, *lpxA*, *rhtC*_2, *hpf*_2, *fpr*, *emrD*_2, *phaC*_5, *smc*_5, *ompR*, *sasA*_11, *mdtC*_1, *pgl*, *stp*, *emrA*_2, *oprM*_4, *sadH*, *lemA*, *mdtA*_5, *oprM*_5, *oprM*_6, *mdtC*_2, *rbn*_2, *pasI*, *lpxL*, *acpP*_4, *nudC*_2, *fusA*_2, *murU*_3

8cVS16^T 1595
vs vs
L. pneumophila 1508

***L. pneumophila* SG1 genes not found in 8cVS16:** *resA*, *hap_1*, *cat*, *merR*, *aroH_1*, *ddl_1*, *ydeN*, *msrA_1*, *ynjF_1*, *cdgJ*, *gapA*, *yedI*, *cynR_1*, *mhpA*, *pbuE*, *ddaF*, *rbsB*, *frcA*, *rbsC*, *dapE_1*, *yfdE*, *katG2*, *cydB_1*, *phrB*, *pknD*, *crtK-2*, *lrgA*, *cynR_2*, *purK*, *ndhB*, *glcC*, *lagD*, *yveA_1*, *mdlC*, *sidE*, *bpoC*, *glsA*, *yfgD*, *yhhQ*, *ttgC_1*, *emrA*, *yfbR*, *fosA*, *ydfG*, *murU*, *secE*, *fusA*, *lpxL_1*, *ddl_2*, *osmY*, *ogt*, *nagB*, *cspD*, *ttgC_2*, *cfiA*, *dmpP*, *hpf*, *artJ_3*, *argI*, *add*, *cdsA*, *lpxA_1*, *ytbE*, *fosB*, *plsC*, *spmA*, *spmB*, *mepM*, *pabC*, *ydzJ*, *arnT_1*, *nanT*, *dam_1*, *ybhF_1*, *norW*, *adc*, *artJ_4*, *ybhF_2*, *dps2*, *gsiA*, *tdh_1*, *cusS*, *czcR*, *alr-1*, *hisF_1*, *hisH_1*, *neuA*, *neuB_1*, *epsM*, *rmlD*, *rmlA*, *rfbB*, *tagO*, *neuB_2*, *kpsM*, *wbbL*, *blh*, *patA_1*, *ampG*, *dauA_1*, *rsbV*, *ybgI*, *lolC*, *ccmH*, *lapB_1*, *glpP*, *dapE_2*, *dapD*, *yihG*, *kmo*, *ycaC*, *ftsI_1*, *pdxB*, *etfA*, *aroK*, *csrA2_1*, *cadA_1*, *cadA_2*, *cusB_1*, *cusA_1*, *ftsP*, *hmp*, *atpG_1*, *atpA_1*, *atpF_1*, *atpB_1*, *atpC_1*, *atpD_1*, *esiB_1*, *intS*, *yhcG_1*, *xerC_1*, *murJ_1*, *yqaB*, *cusB_2*, *cusA_2*, *msrB_1*, *kaiB*, *kaiC*, *mltD_1*, *fliY*, *artJ_5*, *guaD_1*, *ousA*, *argE*, *cutD*, *esiB_2*, *zraR*, *bphD*, *ribBA*, *kup_1*, *hisF_2*, *hisH_2*, *cydB_2*, *proX*, *slyA*, *rhtC*, *yhcG_2*, *Int-Tn*, *yedK*, *lexA_1*, *umuC_1*, *vsr*, *recD2*, *virB9*, *virB4*, *csrA2_2*, *lexA_2*, *mltD_2*, *gloB*, *yejM*, *spnN*, *degP*, *gabD*, *esiB_3*, *gspH*, *lpxB_1*, *calB*, *yedF_1*, *fabH_1*, *gudP*, *arnC*, *arnT_2*, *udp*, *lapB_2*, *cpxA*, *yciV*, *secA*, *zapD*, *bioF*, *bioH*, *bioD*, *decR_1*, *dacC*, *dat*, *apxIB*, *hepA*, *hlyD*, *yddE*, *dtpA_4*, *bamB*, *lapB_3*, *artJ_6*, *sthA_1*, *moeZ_1*, *tolB*, *ybgC*, *algU*, *yfiC_1*, *mta*, *ftsI_2*, *blal*, *ahlD*, *oleD*, *fabH_2*, *mneA*, *thrC*, *galP*, *empA*, *dcsG*, *glgE*, *ung*, *umuC_2*, *lexA_3*, *cpg2*, *tadA*, *tdh_2*, *clcA*, *gata*, *iscA*, *lysU*, *flhA*, *flhB_1*, *flp*, *lysA*, *addA*, *acdA_1*, *gmhB*, *moeZ_2*, *pafA*, *fabI*, *xerC_2*, *clsB*, *lgoT*, *clcB*, *tgpA*, *pilE1_1*, *pilE1_2*, *hipA_1*, *yfiC_2*, *pksJ*, *tycC*, *acrC*, *mmgB*, *dltC_1*, *cypB*, *yxaF*, *yhbO*, *setA*, *guaD_2*, *yypA*, *yabJ*, *proC*, *aroH_2*, *cpoB*, *xerC_3*, *atmI_1*, *atmI_2*, *dkgA*, *mazG*, *dam_2*, *traD*, *traN*, *traC*, *traV*, *csrA_3*, *lexA_4*, *msrA_2*, *msrB_2*, *ynjF_2*, *sthA_2*, *msrAB*, *dbpA*, *kup_2*, *czcA_3*, *czcC_3*, *pcpR_1*, *aadK*, *atmI_3*, *sdeA_1*, *sidJ_1*, *sdeA_2*, *ycgJ*, *rhaS_1*, *oqxB13*, *dltA*, *tam_4*, *alx*, *ibpA_1*, *ibpA_2*, *dauA_2*, *cynT*, *dtpA_5*, *patA_2*, *chiA*, *esiB_4*, *dltC_2*, *fabH_3*, *bcr_1*, *dhaT*, *addB*, *azoR1*, *tam_5*, *dagK*, *sodC*, *mdh*, *nudE*, *aam*, *dnaG*, *hipA_2*, *leuO*, *mgtA*, *dmlR_3*, *kup_3*, *yveA_2*, *katG1*, *aacA4*, *pcpR_2*, *fenF*, *bcr_2*, *elaA*, *rcp1*, *drdA*, *sidD*, *ibpB*, *kynB*, *hss*, *cqsS_1*, *sidJ_2*, *decR_2*, *glbN*, *gcoB*, *rhaS_2*, *lexA_5*, *acdA_2*, *flhB_2*, *vanX*, *dprA*, *pepA_1*, *holC*, *pepA_2*, *murJ_2*, *rpsT*, *uvrC*, *gacA*, *phhA*, *cinA*, *obg*, *rpmA*, *rplU*, *rplY*, *pth*, *ychF*, *ispB*, *cfiB*, *yhcR*, *ghrB*, *leuB*, *tam_6*, *petC*, *petA*, *egtC_3*, *aseR*, *cqsA*, *cqsS_2*, *czcD*, *cca*, *ybaB*, *yajO*, *APOA1BP*, *cspE*, *lubX*, *tpm*, *mdtL_3*, *nylA*, *ravA*, *yedF_2*, *fadM*, *algA*, *soj*, *hcaC*, *mshA*, *msrA_3*, *lpxL_2*, *lpxL_3*, *lpxA_2*, *lpxD_3*, *lpxB_2*, *asnO*, *rbn*, *hap_2*, *atpC_2*, *atpD_2*, *atpG_2*, *atpA_2*, *atpF_2*, *atpH_3*, *atpB_2*, *alkB1*

9fVS26 genes not found in *L. pneumophila* SG1: *murU_1*, *murU_2*, *chrA*, *ykfA_1*, *sdh*, *leuC*, *psuK*, *ybhF*, *ttgI_1*, *gpx1*, *hit*, *mdtK*, *pepA*, *alx_1*, *iucD*, *glar*, *todT_1*, *yecN*, *per1*, *nat*, *budB*, *gabD_1*, *glsA1*, *ykfA_2*, *fabI_1*, *yacG*, *ytcd*, *yedF*, *xylE*, *tolB_1*, *chpD*, *rssB_1*, *divK*, *gatA_1*, *yveA*, *oatA_1*, *fdhA*, *argE_1*, *yffB*, *aacA4_1*, *hss_1*, *rssB_2*, *chaB*, *yfiC*, *MENG*, *yhcG*, *desA3*, *kmo_1*, *aatB_1*, *gap*, *cheW*, *cheR1*, *cheB_1*, *cyaB_1*, *gpmA*, *nprV*, *rcsB*, *rcp1_1*, *rcp1_2*, *cph1*, *dauR*, *tdcB*, *resA_1*, *fadI*, *arcB_1*, *proC_1*, *bepG*, *atpC*, *atpD*, *atpG*, *atpA*, *atpF*, *atpB*, *yidD*, *resA_2*, *hap*, *yhdE*, *msrA*, *aroK_1*, *parA*, *ybgC_1*, *algA_1*, *rna*, *clcA_1*, *oatA_2*, *wbpl*, *capD*, *rmlD_1*, *wecA*, *hldD*, *wzx*, *chrR*, *cspC*, *rocG_1*, *hinT*, *ybaB_1*, *cca_1*, *czcD_1*, *aroK_2*, *hss_2*, *lpxA*, *rhtC_1*, *hpf_1*, *fpr*, *emrD_1*, *ompR*, *sasA_4*, *mdtC_1*, *pgl*, *stp*, *emrA_1*, *sadH*, *lemA*, *oprM_4*, *mdtC_2*, *rbn_1*, *pasI*, *lpxL*, *nudC_1*, *fusA_1*, *murU_3*, *mhqR*, *petC_1*, *petC_2*, *amiC_1*, *yggR*, *dltA_1*, *ydga*, *hrp1_1*, *ligd*, *cheB_2*, *cmdF*, *clcA_2*, *doeB*, *dltA_2*, *pknD_1*, *dgkA*, *rhtC_2*, *icmN*, *kmo_2*, *nudC_2*, *tetA*, *czcD_2*, *slyA_1*, *nhaK*, *fmdA*, *adhT*, *dapL*, *cadI_1*, *nhaP*, *slyA_2*, *asnB*, *treA*, *gloB_1*, *pafA_1*, *rcsA*, *ctfP*, *uspE_1*, *nhaA*, *acr3*, *arsC*, *cadI_2*, *nfdA*, *ycaC_1*, *dnaG_1*, *mdh_1*, *mmpA*, *bioC*, *mshA_1*, *rspB*, *ribBA_1*, *pagN*, *dps2_1*, *adc_1*, *bcd*, *aacA4_2*, *phaB_4*, *fabI_2*, *fabI_3*, *tdcD*, *rocG_2*, *hmp_1*, *yhjQ*, *ftsP_1*, *intS_1*, *psdht*, *yhhT*, *aatB_2*, *cysC*, *yfeW_1*, *pcp*, *greB*, *sasA_5*, *rstA*, *rihA*, *panE*, *hdfR*, *nanT_1*, *phnY*, *phnZ*, *gamA*, *asnC*, *asnA*, *cidA*, *cynR*, *dgdA*, *cspA_1*, *sasA_6*, *todT_2*, *sasA_7*, *hspA*, *rhaS*, *alkA*, *pdxB_1*, *minX*, *ftsH4*, *dhpH*, *rutB*, *fbiB_1*, *ykfA_3*, *speE_3*, *inhA*, *arnC_1*, *guaD*, *tsaA*, *dhaA_1*, *dbpA_1*, *cysZ*, *pnoA*, *tdh*, *lcfB_1*, *pcpR*, *mdtA_5*, *alr*, *dapE*, *dapD_1*, *ycaC_2*, *ftsI*, *pdxB_2*, *pmdD*, *kimA*, *fixB*, *aroK_3*, *proC_2*, *bcsG*, *bcsC*, *gtaB*, *yhjR*, *bcsQ*, *bcsA*, *bcsB*, *bcsZ*, *yabJ_1*, *thiS*, *moeZ*, *ybaB_2*, *tadA_1*, *intS_2*, *glpP_1*, *lexA*, *umuC*, *ligD*, *ku_1*, *aacA4_3*, *doxA*, *srpC*, *fbiB_2*, *kdpB_3*, *uspE_2*, *pacL*, *atl*, *aauG*, *nqrF*, *cyaB_2*, *sasA_8*, *artI*, *cmoA*, *thiM*, *menI*, *aes*, *nanT_2*, *norM*, *ribBA_2*, *fabI_4*, *pafA_2*, *acdA*, *bioF_1*, *yghO*, *pimA*, *ttgF*, *tagG*, *fcl*, *gmd_1*, *algA_2*, *rfbG*, *rfbF*, *pds*, *patA*, *gmd_2*, *arnC_2*, *mshA_2*, *arnC_3*, *rmlD_2*, *rffH*, *lysA_1*, *recB*, *lysA_2*, *mdh_2*, *flhB*, *flhA_1*, *lysS*, *cpoB_1*, *gloB_2*, *farB*, *emrA_2*, *oprM_5*, *yypA_1*, *degQ*, *gabD_2*, *sufA*, *gatA_2*, *artP_1*, *clcA_3*, *ppsC*, *tadA_2*, *mshC*, *yypA_2*, *fusA_2*, *appB*, *ttgI_2*, *ybaB_3*, *hpf_2*, *ybiT*, *cspA_2*, *pknD_2*, *ydaD*, *csrA2*, *sdhE*, *rpoE*, *ybgC_2*, *tolB_2*, *bamB_1*, *derI*, *yveA*, *dacB*, *adiC*, *ibpA*, *glpE*, *ftsP_2*, *yvgN*, *pah*, *hrp1_2*, *csd*, *yjiG*, *sthA*, *ynjF*, *COQ3_3*, *yabJ_2*, *menH_3*, *dadA*, *FCS1*, *amiC_2*, *rcsC_4*, *carA_3*, *ydjP*, *cpg2_1*, *speE_4*, *bioD1*, *bioH_1*, *bioF_2*, *pdeG*, *secA_1*, *dacC_1*, *ybeZ*, *sasA_9*, *lapB*, *fabG_3*, *fabH*, *lpxB*, *dnaG_2*, *intA*, *dhaA_2*, *nhaP2*, *golD*, *bioH_2*, *kynu*, *yybR*, *potE*, *erg*, *pksC*, *hisH*, *hisF*, *kup*, *xerC*, *dacC_2*, *secA_2*, *mtfA*, *sasA_10*, *mmpL3*, *hmp_2*, *menH_4*, *gbpA*, *rbn_2*, *alkB2*, *carA_4*, *cca_2*, *slyA_3*, *kata*, *atmI*, *yijE*, *hipA*, *aaeB*, *aaeA*, *hisC_3*, *rhaR*, *atoC_3*, *thiD*, *smc_5*, *dauA*, *ampG_1*, *cpoB_2*, *gdhA*, *alx_2*, *rlpA_3*, *pdpE*, *dbpA_2*, *capB_3*, *rcsC_5*, *lgrD*, *malT*, *bamB_2*, *adc_2*, *artP_2*, *argF*, *ybaA*, *arcB_2*, *flp*, *arcB_3*, *argE_2*, *lcfB_2*, *lrp*, *oprM_6*, *todT_3*, *phaB_5*, *ampG_2*, *caiA*, *spxA*, *phaC_5*, *glpP_2*, *kdpA*, *kdpB_4*, *kdpC*, *kdpD*, *flhA_2*, *fabG_4*, *sasA_11*, *rcp1_3*, *ku_2*, *aldH1*, *rcsC_6*, *cpg2_2*, *selO*, *mnaT*, *sodC1*, *csdA*, *vldW*, *ahcY_3*, *carA_5*, *aroH*, *arnC_4*, *decR*, *iaaA*, *cphB*, *ybaL*, *yfeW_2*, *dipZ*, *madD*, *ndh*, *lysP*, *proP_5*

9fVS26	1596
vs	vs
<i>L. pneumophila</i>	1508

dam, sauU_3, dps2_2, nanT_3, arnT, ctb, cydB, dapD_2, lcfB_3, dltC, fabG_5, nphT7, acpP_4, emrD_2, cpdA_3

L. pneumophila SG1 genes not found in 9fVS26: resA, hap_1, cat, merR, aroH_1, ddl_1, ydeN, msrA_1, ynfF_1, cdgJ, gapA, yedI, cynR_1, mhpA, pbuE, ddaF, rbsB, frcA, rbsC, dapE_1, yfdE, katG2, cydB_1, phrB, pknD, crtK-2, lrgA, cynR_2, purK, ndhB, gltC, lagD, yveA_1, mdlC, sidE, bpoC, glsA, yfgD, yhhQ, ttgC_1, emrA, yfbR, fosA, ydfG, murU, secE, fusA, lpxL_1, ddl_2, osmY, ogt, nagB, cspD, ttgC_2, cfiA, dmpP, hpf, artJ_3, argI, add, cdsA, lpxA_1, ytbE, fosB, plsC, spmA, spmB, mepM, pabC, ydjZ, arnT_1, nanT, dam_1, ybhF_1, norW, adc, artJ_4, ybhF_2, dps2, gsiA, tdh_1, cusS, czcR, alr-1, hisF_1, hisH_1, neuA, neuB_1, epsM, rmlD, rmlA, rfbB, tagO, neuB_2, kpsM, wbbL, blh, patA_1, ampG, dauA_1, rsbV, ybgI, lolC, ccmH, lapB_1, gltP, dapE_2, dapD, yihG, kmo, ycaC, ftsI_1, pdxB, etfA, aroK, csrA2_1, cadA_1, cadA_2, cusB_1, cusA_1, ftsP, hmp, atpG_1, atpA_1, atpF_1, atpB_1, atpC_1, atpD_1, intS, yhcG_1, xerC_1, murJ_1, yqaB, cusB_2, cusA_2, msrB_1, kaiB, kaiC, mltD_1, fliY, artJ_5, guaD_3, oasA, argE, cutD, zraR, bphD, ribBA, kup_1, hisF_2, hisH_2, cydB_2, proX, slyA, rhtC, yhcG_2, Int-Tn, yedK, lexA_1, umuC_1, vsr, recD2, virB9, virB4, csrA2_2, lexA_2, mltD_2, gloB, yejM, spnN, degP, gabD, esiB_3, gspH, lpxB_1, calB, ycdF_1, fabH_1, gudP, arnC, arnT_2, udp, lapB_2, cpxA, yciV, secA, zapD, bioF, bioH, bioD, decR_1, dacC, dat, apxIB, hepA, hlyD, yddE, dtpA_4, bamB, lapB_3, artJ_6, sthA_1, moeZ_1, tolB, ybgC, algU, yfiC_1, mta, ftsI_2, blaI, ahlD, oleD, fabH_2, mneA, thrC, galP, empA, dcsG, glgE, ung, umuC_2, lexA_3, cpg2, tadA, tdh_2, clcA, gatA, iscA, lysU, flhA, flhB_1, fliP, lysA, addA, acdA_1, gmhB, moeZ_2, pafA, fabI, xerC_2, clsB, lgoT, clcB, tgpA, pilE1_1, pilE1_2, hipA_1, yfiC_2, pksJ, tycC, acrC, mmgB, dltC_1, cypB, yxaF, yhbO, setA, guaD_2, yyaP, yabJ, proC, aroH_2, cpoB, xerC_3, atm1_1, atm1_2, dkgA, mazG, dam_2, traD, traN, traC, traV, csrA_3, lexA_4, msrA_2, msrB_2, ynfF_2, sthA_2, msrAB, dbpA, kup_2, czcA_3, czcC_3, pcpR_1, aadK, atm1_3, sdeA_1, sidJ_1, sdeA_2, ycgJ, rhaS_1, oqxBI3, dltA, tam_4, alx, ibpA_1, ibpA_2, dauA_2, cynT, dtpA_5, pata_2, chiA, esiB_4, dltC_2, fabH_3, bcr_1, dhaT, addB, azoR1, tam_5, dagK, sodC, mdh, nudE, aam, dnaG, hipA_2, leuO, mgtA, dmlR_3, kup_3, yveA_2, katG1, aacA4, pcpR_2, fenF, bcr_2, elaA, rcpl, drrA, sidD, ibpB, kynB, hss, cqsS_1, sidJ_2, decR_2, glbN, gcoB, rhaS_2, lexA_5, acdA_2, flhB_2, vanX, dprA, pepA_1, holC, pepA_2, murJ_2, rpsT, uvrC, gacA, phhA, cinA, obg, rpmA, rplU, rplY, pth, ychF, ispB, cfiB, yhcR, ghrB, leuB, tam_6, petC, petA, egtC_3, aseR, cqsA, cqsS_2, czcD, cca, ybaB, yajO, APOA1BP, cspE, lubX, tpm, matL_3, nylA, ravA, ycdF_2, fadM, algA, soj, hcaC, mshA, msrA_3, lpxL_2, lpxL_3, lpxA_2, lpxD_3, lpxB_2, asnO, rbn, hap_2, atpC_2, atpD_2, atpG_2, atpA_2, atpF_2, atpH_3, atpB_2, alkB1

L. anisa genes not found in L. pneumophila SG1: catD_1, malt_1, fabI_1, ackA_1, xpkA_1, hmp_1, cusA, cusB, cpbD_1, xerC_4, slyA_1, czcD_1, yhaJ_1, nudC_1, tcmN, ygiD, dgkA, pknD_1, dltA_1, cmdF, algC_1, ldh_1, sufS_1, dltA_2, yggR, amiC_1, sspB, sspA_1, slyA_2, hemX, czcD_2, cca_1, hinT, rocG, cheB_1, cspA_1, chrR, wzxE, fcl_1, wecA, rmlD_1, capD, wbpI, oata_1, clcA_1, guaB_1, rna, algA_1, ybgC_1, parA, yhaJ_2, msrA, yhdE, panD_1, cysK, hap, resA_1, recF_1, yidD, bepG, proC_1, arcB_1, glpQ, fadI, catD_2, cmpR, mshA_1, tagH, epsL, per, mhpC, pknD_2, resA_2, tdcB, rcpl_1, rcpl_2, gpmA, cyaB, cheB_2, gap, traM_1, traL_1, traK_1, traJ_1, traI_1, traG_1, virB4_1, egtB_1, egtB_2, gshA_1, hemH_1, purK_1, purE_1, ndhB_1, gltR, apxIB_1, edd_1, glsA1_1, bioD1_1, phrA_1, appB, ufaA1, purK_2, purE_2, ndhB_2, hsfR, apxIB_2, menH_3, panD_2, ddl, ygeA, mdrP, riza, xpkA_2, MENG, yfiC, chaB, hss_1, yffB, lon2, ephD, argE_1, fdhA, bcr, rimL, oata_2, paaK, sufS_2, glaH, gshA_2, gatA_1, livK, divK, rssB, csbC_1, kdnA, neoG, csbC_2, xylE, ohrA, fmdA, adh, dapL, cda, srpC, desA3, cspV, mdh_1, rcpl_3, mmpA, lolE_1, ldh_2, mshA_2, rspB, ribBA_1, motA_1, bcd, recF_2, xerC_5, xerD_1, xerD_2, wecD_1, thiK_1, desA, baeB, baeC_1, novP, lolE_2, intS_1, hin_1, intS_2, aatB, cmk_1, yfeW_1, greB, rstA, rihA, yofA, nanT_1, phnY, phnZ, gamA, asnC, asnA, dgda, cynR, cidA, glaR_1, cspA_2, fixL, cheB_3, todT_1, rhaS, serA, xerD_3, xerD_4, xerC_6, pdxB_1, ftsH4, dhpH, gshA_3, rutB, fbiB_1, rimJ, inhA, arnC_1, guaD, tqsA, dhaA, dbpA_1, cysZ, pnoA, srkA_3, ttuB, tdh, hutG_1, lcfB, pcpR, alr, dapE, dapD_1, htrA_1, pdxB_2, pmdD, kimA, fixB, aroK_1, proC_2, bcsG, bcsC, gtaB_1, bcsA, bcsB, bcsZ, thiS, moeZ, mmcO, motA_2, xerC_7, xerD_5, xerD_6, xerC_8, xerD_7, xerD_8, psdht, fbiB_2, atl, ahpD_1, adiC, argT, cmoA, thiM, menI, aes, nanT_2, norM, bepA_1, ribBA_2, fabI_2, pgl_1, acdA, spsI, bioF_1, yghO, pimA, ttgF, aaeA, tagG, fcl_2, gmd_1, algA_2, rfbG, rfbF, dadA_1, pata, gmd_2, mshA_3, rmlC, rmlD_2, rffH, lysA_1, lysA_2, mdh_2, dprE1_1, flhB, flhA_1, motB_3, lysS, tylM1, cpoB_1, sasA_4, mltD, farB, degQ, gabD_1, fadA_3, sufA, gata_2, artp_1, clcA_2, ppsC, araQ, guaB_2, fusA_1, ttgI_1, hchA, cvfB, ybiT, cspA_3, csrA2, sdhE, rpoE, ybgC_2, bamB_1, dltA_3, rpiB, dacB, copB, copA_3, yvgN, fabG_3, hutG_2, hrp1, csd, yjiG, COQ3_3, thi4, slrP, dadA_2, FCS1, amiC_2, ydjP, cpg2_1, speE_3, bioD1_2, bioF_2, pdeG, secA_1, dacC_1, ybeZ, sasA_5, lapB, cmk_2, thiK_2, oprB, fabG_4, lpxB, nhaP2, kynu, yybR, potE, erg, baeC_2, hisH, hisF, kup, xerC_9, dacC_2, dgt, secA_2, mtfA, sasA_6, mmpL3, gsta, hmp_2, menH_4, artI, rbn_1, alkB2, bioD1_3, glsA1_2, edd_2, cca_2, slyA_3, besD, kata, yijE, hipA, hisC_3, rhaR, thiD, smc_5, sfp, csrA_4, cpoB_2, pal_3, dbpA_2, capB_3, carA_3, yhaJ_2, htrA_2, pbpE, spkD, rcsC_4, lgrD, dprE1_2, malt_2, prs_3, cadA, bamB_2, artP_2, argF, sspA_2, ybaA, flp, arcB_2, argE_2, intS_3, sasA_7, csrA_5, celA, gtaB_2, algC_2, wbiB, bepA_2, galE1, ywqF, yfcJ, lrp, todT_2, phaB_4, caiA, rayT, aroK_2, kdpA, kdpB_3, kdpC, kdpD, flhA_2, fabG_5, ligD_1, ligD_2, ku, aldH1, rcsC_5, cpg2_2, selO, mshD_3, sodC1, ahcY_3, carA_4, tetA, aroH, arnC_2, maf, decR, iaaA, cphB, ybaL, yfeW_2, dipZ, madD, ndh, umuC, lysP, proP_5, dam, sauU_3,

L. anisa
vs
L. pneumophila

1677
vs
1508

mrgA, *nanT*_3, *arnT*, *ctb*, *cydB*, *hin*_2, *dapD*_2, *dltA*_4, *dltC*, *fabG*_6, *nphT7*, *acpP*_4, *emrD*_1, *murJ*, *cpbD*_2, *proP*_6, *traM*_2, *traL*_2, *traK*_2, *traJ*_2, *traI*_2, *traG*_2, *virB4*_2, *csrA*_6, *xerC*_10, *mecI*, *thrB*, *aroK*_3, *hss*_2, *lpxA*, *fpr*, *emrD*_2, *phaC*_5, *smc*_6, *secA*_3, *ahpD*_2, *ompR*, *sasA*_8, *wecD*_2, *hemH*_2, *mdtC*_1, *ppaX*, *csbC*_3, *edd*_3, *pgl*_2, *stp*, *mdtA*_5, *oprM*_4, *tigC*, *mdtC*_2, *rbn*_2, *pasI*, *lpxL*, *acpP*_5, *nudC*_2, *fusA*_2, *chrA*, *ykfA*_1, *leuC*, *ybhF*, *tigI*_2, *gpxI*, *hit*, *pepA*_3, *frsA*, *iucD*, *glaR*_2, *tmoT*, *sasA*_9, *yecN*, *perI*, *speE*_4, *budB*, *gabD*_2, *ykfA*_2, *ackA*_2, *fabI*_3, *yacG*, *cpdA*_3, *nhaK*, *srfAB*

***L. pneumophila* SG1 genes not found in *L. anisa*:** *recF*, *resA*, *hap*_1, *cat*, *yhaJ*, *merR*, *aroH*_1, *ddl*_1, *ydeN*, *msrA*_1, *ynjF*_1, *cdgJ*, *gapA*, *yedI*, *cynR*_1, *mhpA*, *pbuE*, *ddaF*, *rbsB*, *frsA*, *rbsC*, *dapE*_1, *yfdE*, *katG2*, *cydB*_1, *pknD*, *phrA*, *lrgA*, *cynR*_2, *purK*, *purE*, *ndhB*, *lagD*, *mdlC*, *sidE*, *bpoC*, *yhhQ*, *tigC*_1, *yfbR*, *fosA*, *secE*, *fusA*, *lpxL*_1, *gshA*, *ddl*_2, *ogt*, *nagB*, *edd*, *csbC*, *hemH*, *csfD*, *tigC*_2, *cfiA*, *dmpP*, *artJ*_3, *argI*, *cdsA*, *lpxA*_1, *yfbE*, *plsC*, *pabC*, *ydjZ*, *sufS*, *arnT*_1, *nanT*, *dam*_1, *ybhF*_1, *ybhR*_1, *norW*, *artJ*_4, *ybhF*_2, *ybhR*_2, *gsiA*, *ankX*, *tdh*_1, *hutG*, *pdaC*, *cusS*, *czcR*, *alr-1*, *hisF*_1, *hisH*_1, *neuA*, *neuB*_1, *rfbC*, *rmlD*, *rmlA*, *rfbB*, *tagO*, *neuB*_2, *kpsM*, *wbbL*, *blh*, *patA*_1, *rsbV*, *ybgI*, *lolC*, *macA*, *lapB*_1, *dapE*_2, *dapD*, *yihG*, *yrbG*, *htrA*, *pdxB*, *etfA*, *aroK*, *korB*, *csrA2*_1, *cadA*_1, *cadA*_2, *cusB*_1, *cusA*_1, *hmp*, *intS*, *yhcG*_1, *murJ*_1, *tam*_3, *yqaB*, *cusB*_2, *cusA*_2, *msrB*_1, *kaiB*, *kaiC*, *mltD*_1, *fliY*, *artJ*_5, *guaD*_1, *potD*, *potB*, *potA*, *ousA*, *argE*, *cutD*, *zraR*, *bphD*, *bepA*, *ribBA*, *kup*_1, *hisF*_2, *hisH*_2, *cydB*_2, *proX*, *slyA*, *yhcG*_2, *Int-Tn*, *yedK*, *umuC*_1, *vsr*, *recD2*, *virB9*, *virB4*, *csrA2*_2, *qseC*, *mltD*_2, *yejM*, *spnN*, *degP*, *gabD*, *gspH*, *lpxB*_1, *calB*, *yedF*_1, *arnC*, *arnT*_2, *thiK*, *udp*, *cmk*, *lapB*_2, *cpxA*, *yrciV*, *secA*, *zapD*, *bioF*, *bioD*, *decR*_1, *dacC*, *dat*, *apxIB*, *hepA*, *hlyD*, *yddE*, *bamB*, *lapB*_3, *artJ*_6, *sthA*_1, *moeZ*_1, *ybgC*, *algU*, *yfiC*_1, *blaI*, *mneA*, *thrC*, *galP*, *empA*, *desG*, *glgE*, *ung*, *umuC*_2, *cpg2*, *guaB*, *lacG*, *tdh*_2, *clcA*, *gatA*, *iscA*, *lysU*, *flhA*, *flhB*_1, *fliP*, *dprE1*, *argP*, *lysA*, *garP*, *acdA*_1, *gmhB*, *moeZ*_2, *udk*_3, *fabI*, *clsB*, *lgoT*, *clcB*, *tgpA*, *gstB*, *pilE1*_1, *pilE1*_2, *gadC*_4, *hipA*_1, *yfiC*_2, *pksJ*, *acrC*, *mmgB*, *dltC*_1, *cypB*, *yxaF*, *yhbO*, *setA*, *guaD*_2, *proC*, *aroH*_2, *yceF*, *cpoB*, *atm1*_1, *atm1*_2, *dkgA*, *mazG*, *dam*_2, *traN*, *traC*, *traV*, *msrA*_2, *msrB*_2, *ynjF*_2, *sthA*_2, *msrAB*, *dbpA*, *kup*_2, *czcA*_3, *czcC*_3, *pcpR*_1, *aadK*, *atm1*_3, *sdeA*_1, *sidJ*_1, *sdeA*_2, *ycgJ*, *rhaS*_1, *oqxBI3*, *dltA*, *tam*_4, *cynT*, *dtpA*_5, *patA*_2, *chiA*, *esiB*_4, *dltC*_2, *fabH*_3, *bcx*_1, *dhaT*, *ackA*, *addB*, *ldh*, *lolE*, *azoR1*, *motA*, *tam*_5, *dagK*, *sodC*, *ahpD*, *mdh*, *nudE*, *aam*, *hipA*_2, *leuO*, *mgtA*, *dmlR*_3, *kup*_3, *katG1*, *pcpR*_2, *fenF*, *bcx*_2, *elaA*, *rcp1*, *drrA*, *sidD*, *hoxH*, *asrB*, *ndhI*, *hypE*, *hypD*, *hypC*, *hypF*, *hypB*, *nixA*, *algC*, *kynB*, *hss*, *cqsS*_1, *sidJ*_2, *decR*_2, *aspC*, *glbN*, *gcoB*, *rhaS*_2, *lexA*_5, *hin*, *acdA*_2, *flhB*_2, *vanX*, *dprA*, *murJ*_2, *cfiB*, *yhcR*, *ghrB*, *leuB*, *tam*_6, *sspA*, *egtC*_3, *aseR*, *cqsA*, *cqsS*_2, *czcD*, *cca*, *APOA1BP*, *csfE*, *lubX*, *tpm*, *mdtL*_3, *guaC*, *nylA*, *ravA*, *yedF*_2, *fadM*, *algA*, *soj*, *hcaC*, *mshA*, *msrA*_3, *panD*, *lpxL*_2, *lpxL*_3, *lpxD*_3, *lpxB*_2, *btuD*_3, *asnO*, *cbs*, *rbn*, *hap*_2, *alkB1*

Table S5. List of virulence genes shared among the *Legionella* species belonging to the same clade: 8cVS16^T, 9fVS26, *Legionella anisa* WA-316-C3 ATCC35292^T, *Legionella bozeman* WIGA ATCC 33217^T, *Legionella parisiensis* PF-209C-C2 ATCC35299^T, *Legionella tusconensis* 1087AZH ATCC49180^T, *Legionella wadsworthii* 81-716A ATCC 33877^T. All species show blue-white autofluorescence.

Present genes*	<i>htpB</i> , <i>pilB</i> , <i>pilC</i> , <i>pilD</i> , <i>pilE</i> , <i>pilM</i> , <i>pilN</i> , <i>pilO</i> , <i>pilP</i> , <i>pilQ</i> , <i>mip</i> , <i>enhA</i> , <i>ccmA</i> , <i>ccmC</i> , <i>ccmD</i> , <i>ccmE</i> , <i>ccmF</i> , <i>feoB</i> , <i>frgA</i> , <i>iraA</i> , <i>iraB</i> , <i>lbtB</i> , <i>rpoS</i> , <i>csrA</i> , <i>letS</i> , <i>relA</i> , <i>dotA</i> , <i>dotB</i> , <i>dotC</i> , <i>dotD</i> , <i>icmB/dotO</i> , <i>icmC/dotE</i> , <i>icmD/dotP</i> , <i>icmE/dotG</i> , <i>icmF</i> , <i>icmG/dotF</i> , <i>icmH/dotU</i> , <i>icmJ/dotN</i> , <i>icmK/dotH</i> , <i>icmL/dotI</i> , <i>icmN/dotK</i> , <i>icmO/dotL</i> , <i>icmP/dotM</i> , <i>icmQ</i> , <i>icmS</i> , <i>icmV</i> , <i>icmW</i> , <i>icmX</i> , <i>lvgA</i> , <i>lspC</i> , <i>lspD</i> , <i>lspE</i> , <i>lspF</i> , <i>lspG</i> , <i>lspH</i> , <i>lsp</i>
	<i>lidL</i> , <i>drrA/sidM</i> , <i>laiE</i> , <i>lepA</i> , <i>lidA</i> , <i>ralF</i> , <i>sdbA</i> , <i>sdbB-like</i> , <i>sdbB</i> , <i>sdbC</i> , <i>sdcA</i> , <i>sdeA/laiA</i> , <i>sdeB/laiB</i> , <i>sdeC/laiC</i> , <i>sdeD/laiF</i> , <i>sdhA</i> , <i>lvhB7</i> , <i>lvhB5</i> , <i>lvhB3</i> , <i>icmR</i> , <i>lbtA</i> , <i>sidA</i> , <i>sidB</i> , <i>sicC</i> , <i>sidD</i> , <i>sidE-like</i> , <i>sidE/laiD</i> , <i>sidF</i> , <i>sidG</i> , <i>sidH</i> , <i>vipA</i> , <i>vipD1</i> , <i>vipD2</i> , <i>vipD3</i> , <i>vipE</i> , <i>wipB</i> , <i>wipC</i> , <i>ylfB</i> , <i>rtxA</i>

* *wcbB* gene is present only in 8cVS16^T and 9fVS26 isolates.