

Figure S1. The neighbor-joining phylogenetic tree of *vibrio tubiashii* FP17 strain based on several housekeeping genes: 16S rRNA(A), *ftsZ*(B), *gapA*(C), *gyrB*(D), *mreB*(E), *pyrH*(F), *rpoA*(G) and *topA*(H).

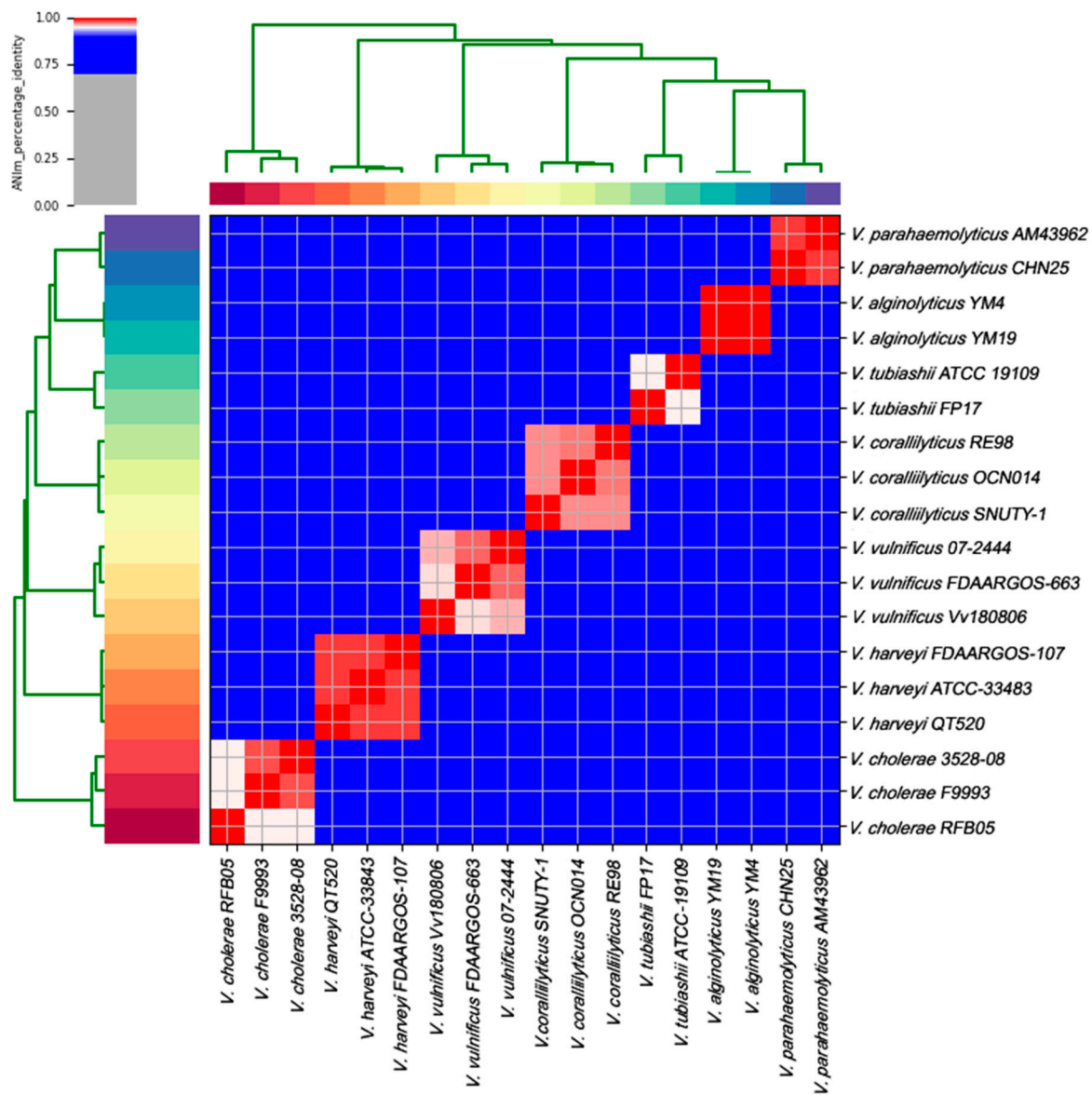


Figure S2. Average nucleotide identity (ANI) value between 17 *Vibrio* strains.

Table S1. Comparison of the chromosomal properties of *V. tubiashii* FP17, ATCC19019 and

ATCC19016 strain.

Strain	FP17	ATCC19109	ATCC19106
Genome size (bp)	5,261,336	5,540,337	5,353,266
GC content	45.8%	45.03%	44.84%
Annotated genes	4824	5080	4950
tRNA	119	117	86(total RNA)
rRNA	31	31	
Chromosome No.	2	2	2
Plasmid No.	1	4	
GeneBank Accession No.	PRJNA792890	CP009354, CP009355, CP009356, CP009357, CP009358, CP009359	

Table S2. Information of prophage in FP17.

Region	Region_length	Completeness	Score	Region_position	GC	Most Common Phage	Gene number
1	7.9Kb	intact	95	Chr1:1588633-1596535	43.33%	NC_016162	13
2	25.8Kb	incomplete	40	Chr1:1810631-1836501	43.77%	NC_009904	24
3	20.2Kb	intact	122	Chr2:808734-829014	43.06%	NC_016162	31
4	11.7Kb	intact	109	Plasmid1:44929-56721	44.86%	NC_016162	17

Table S3. Summary part of the antimicrobial resistant genes in FP17.

Gene location	Gene	Identify%	Description	Accession Number
chrI_orf00212	crp	94.76	Regulator that represses RND multidrug efflux pump	AP009048.1
chrI_orf01094	tet(35)	88.08	Tetracycline resistance ABC efflux pump	AF353562.1
chrI_orf02634	tufA	86.26	Elfamycin resistant EF-Tu	AE014075.1
chrI_orf02681	tufA	86.26	Elfamycin resistant EF-Tu	AH002539.2
chrI_orf02674	rpoB	85.02	rifamycin-resistant beta-subunit of RNA polymerase	BA000007.3
chrI_orf02390	parE	78.82	Fluoroquinolone resistance	AE006468.2
chrI_orf00314	murA	78.47	fosfomycin transferase	CP009072
chrI_orf01598	gyrA	77.29	resistance to triclosan	AE006468.2
chrI_orf00004	gyrB	76.80	fluoroquinolone resistant	AE006468.2
chrII_orf04672	catB9	75.98	chloramphenicol acetyltransferase	AF462019
chrI_orf02212	PtsI	74.52	phosphotransferase	HG738867
chrI_orf00168	ugd	73.71	pmr phosphoethanolamine transferase	U00096
chrI_orf00654	MexF	70.11	multidrug resistance RND efflux pump	AE004091.2
chrI_orf06119	GlpT	69.85	resistance to fosfomycin	HG738867
chrI_orf02389	parC	69.37	fluoroquinolone resistant	AE006468.2
chrI_orf02637	rpsL	69.11	resistance to Streptomycin	AE000516
chrI_orf01840	msbA	68.50	multidrug resistance ABC efflux pump	U00096.3
chrI_orf00490	folP	61.77	sulfonamide resistant dihydropteroate synthase	U00096.3
chrI_orf02635	fusA	59.91	resistance to fusidic acid	BX571856
chrII_orf03778	QnrVC1	57.87	quinolone resistance protein	EU436855
chrI_orf02825	cya	55.46	adenylate cyclase	HG738867
chrII_orf03882	katG	54.60	isoniazid resistant	AL123456.3
chrI_orf02673	rpoC	54.41	vancomycin-resistant beta prime subunit of RNA polymerase	CP010905.2
chrI_orf00386	dfrA3	52.80	trimethoprim resistant dihydrofolate reductase	J03306
PlasmidI_orf02995	catB9	51.87	chloramphenicol acetyltransferase	AF462019
chrI_orf02359	LpxC	51.85	Acinetobacter mutant Lpx gene conferring resistance to colistin	CP010781.1
chrI_orf01882	macB	51.80	multidrug resistance ABC efflux pump	AY768532
chrI_orf00653	MexE	50.26	multidrug resistance RND efflux pump	AE004091.2
chrI_orf02884	mexW	49.56	multidrug resistance RND efflux pump	NC_002516.2
chrI_orf00564	fusA	47.82	resistance to fusidic acid	BX571856
chrI_orf02699	cpxA	47.38	multidrug resistance RND efflux pump	BA000007.3
chrI_orf02270	LpxA	47.15	Acinetobacter mutant Lpx gene conferring resistance to colistin	CP010781.1
chrI_orf00485	OmpU	47.06	General Bacterial Porin with reduced permeability to peptide antibiotics	KJ699300
chrI_orf02395	tolC	46.19	multidrug resistance ABC efflux pump	FJ768952
chrI_orf02698	CpxR	45.82	multidrug resistance RND efflux pump	LT673656.1
chrI_orf01522	hmrM	45.58	multidrug resistance MATE efflux pump	CP002276.1
chrI_orf02370	PBP3	45.46	Penicillin-binding protein mutations conferring resistance to beta-lactam antibiotics	L42023.1
chrI_orf02003	rpsA	44.21	pyrazinamide resistant	AL123456.3
chrI_orf00518	ileS	42.55	antibiotic resistant isoleucyl-tRNA synthetase	X74219

Table S4. Antimicrobial susceptibility of *V. tubiashii* FP17. (Sensitivity: S=sensitive, M= moderately sensitive, R=resistant).

Antimicrobial agent	Concentration (µg/tablet)	Diameter of inhibition zone (mm)	Sensitivity
Chloromycetin	30	29	S
Florfenicol	30	28	S
Cefoperazone	75	25	S
Ciprofloxacin	5	25	S
Carbenicillin	100	23	S
Ampicillin	10	21	S
Norfloxacin	10	18	S
Gentamicin	10	17	S
Polymyxin B	300	12	S
Enrofloxacin	10	24	M
Cotrimoxazole (SMZ/TMP)	23.75/1.25	21	M
Piperacillin	100	20	M
Ceftriaxone	30	19	M
Cefuroxim	30	18	M
Furazolidone	300	16	M
Ofloxacin	5	15	M
Penicillin	10 (U)	16	R
Cefazolin	30	13.5	R
Amikacin	30	13	R
Minocycline	30	13	R
Rifampicin	5	13	R
Kanamycin	30	12	R
Neomycin	30	11	R
Amoxicillin	25	11	R
Tetracycline	30	10	R
Erythromycin	15	10	R
Cephalexin	30	10	R
Doxycycline	30	10	R
Ceftazidime	30	7	R
Cefradine	30	7	R
Clindamycin	2	7	R
Midecamycin	30	7	R
Oxacillin	1	7	R
Vancomycin	30	7	R