

Streptomyces enissocaesilis* L-82 has broad-spectrum antibacterial activity and promotes growth for *Carassius auratus

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Tab.S1 The physiological & biochemical reactions of strain L-82

Measuring items	Biochemical reaction	Measuring items	Biochemical reaction
Raffinose	++	Mannitol	+
Galactose	++	Sucrose	+
Inositol	++	Gelatin Liquefaction	-
Fructose	+	H ₂ S	+
Glucose	+	Hydrolysis of cellulose	-
Xylose	+	Amylohydrolysis	+
Arabinose	+	Glycerol	+
Rhamnose	+		

Tab. S2 Detection of MIC and MBC values of fermentation supernatant of strain L-82 against*A. hydrophila*

Index	Dilution multiple of fermentation broth											
	CK1	CK2	0	2	4	8	16	32	64	128	256	512
MIC	+	-	-	-	-	-	-	-	-	+	+	+
MBC			-	-	-	-	-	+	+	+	+	+

Note: “+” indicates positive; “-” indicates negative

CK1 : LB medium without *A.hydrophila* as negative control ; CK2 : LB medium with *A.hydrophila* as positive control ;

Tab. S3 Statistics of the structure prediction of the genome of strain L-82

Type		Number	Length (bp)	% genome
tRNA		119	9,177	0.11
	16S rRNA	6	9,138	0.11
rRNA	23S rRNA	6	18,727	0.22
	5S rRNA	6	702	0.01
CDS		7,402	7,482,903	87.12
CRISPR		0	0	0.00
Genome_island		1	215,386	2.51

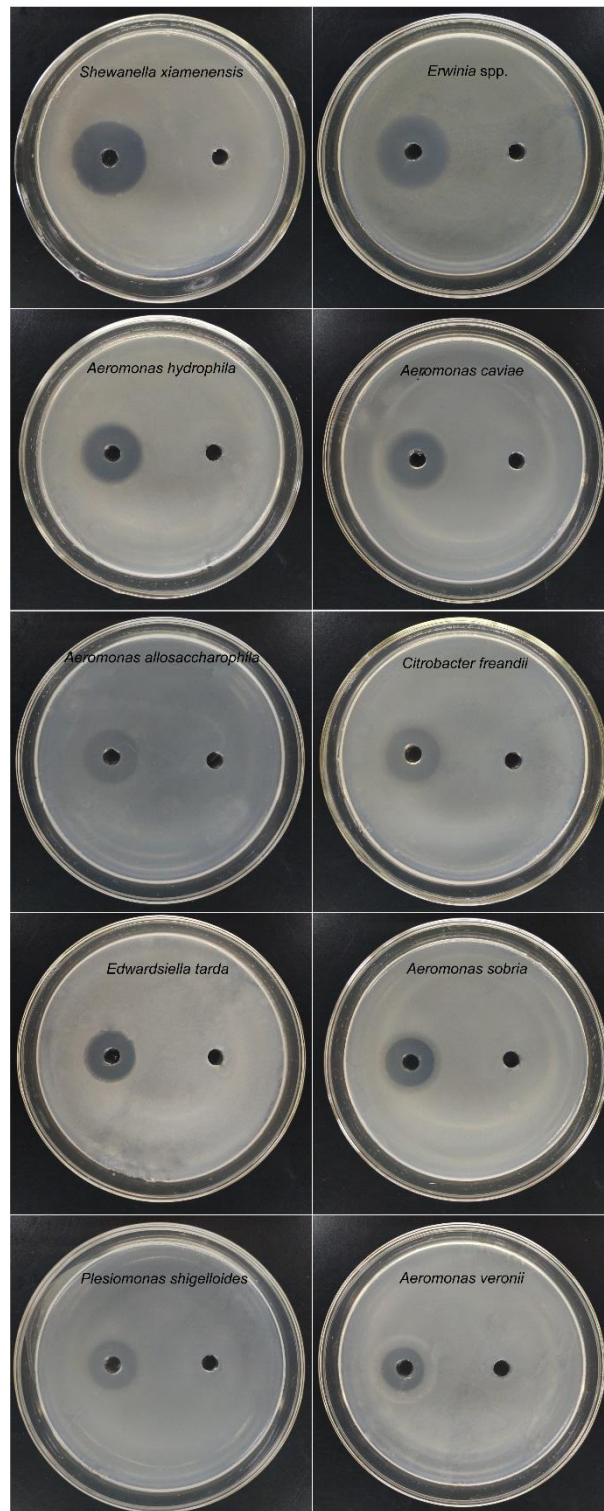


Fig.S1 The antibacterial activity of fermentation supernatant of strain L-82 on fish pathogens

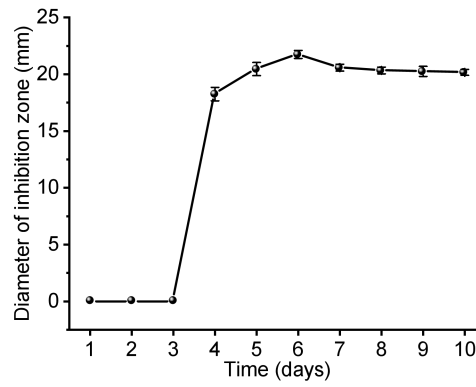


Fig. S2 The antibacterial activity of fermentation supernatant of strain L-82 at different fermentation time on *A. hydrophila*

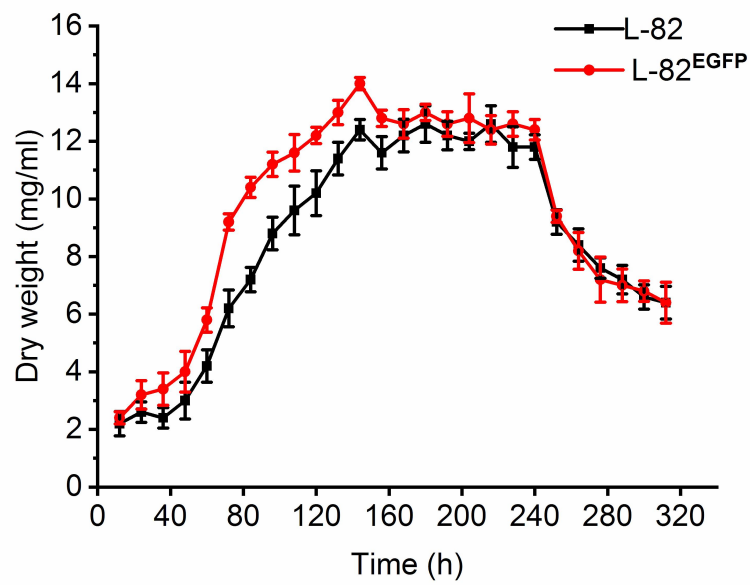


Fig. S3 The growth curve of strain L-82 and strain L-82^{EGFP}