

Table S1. *Staphylococcus* spp. strains sensitive to the St\_134 phage

No	CEMTC* number	Collection date	Sample source	Coordinate s	Antibi otic resista nce	Aminoglycosides	$\beta$ -lactams	Fluoroquinolones	Glycopeptides	Lincosamides	Macrolides	Oxazolidinones	Phenicol	Sulfonamides	Tetracyclines	GenBank Accession number
<b><i>S. aureus</i> complex (<i>S. roterodami</i>/<i>S. argenteus</i>) (1/1)</b>																
1	3692	May 2019	periprosthetic joint infection	55°02'15"N 82°55'39"E	S											OR856624
<b><i>S. auricularis</i> (1/5)</b>																
2	2738	Sep 2016	ear swab	54°51'02"N 83°06'16"E	R					DA						MZ014399
<b><i>S. capitis</i> (4/4)</b>																
3	1590	Apr-2013	urine	54°51'02"N 83°06'16"E	S											MZ014405
4	1680	Nov-2011	nasal swab	54°51'02"N 83°06'16"E	S											MZ014406
5	2904	Feb-2017	ear swab	54°51'02"N 83°06'16"E	S											MZ014411
6	3590	Jan-2019	skin	54°51'02"N 83°06'16"E	S											MZ014407
<b><i>S. caprae</i> (5/5)</b>																
7	1849	Apr-2014	skin, auricle	54°51'02"N 83°06'16"E	S											MZ014408
8	2305	Dec-2015	periprosthetic joint infection	55°02'15"N 82°55'39"E	S											MZ014409
9	2739	Sep-2016	skin, auricle	54°51'02"N 83°06'16"E	S											MZ014410
10	3411	Jun-2018	skin	54°51'02"N 83°06'16"E	S											MZ014412
11	3440	Aug-2018	skin, psoriasis	54°51'02"N 83°06'16"E	S											MZ014413
<b><i>S. casei</i> (2/2)</b>																
12	1626	Apr-2013	feces	54°51'02"N 83°06'16"E	S											MZ014416
13	2931**	Mar-2017	guinea pig, oral cavity	54°56'20"N 83°11'00"E	S											MW979954
<b><i>S. coagulans</i> (1/8)</b>																
14	3359**	Mar-2018	skin, dog	54°58'38"N 83°02'42"E	S											MW979970
<b><i>S. cohnii</i> (2/5)</b>																
15	2687	Jul-2016	feces	55°02'06"N 82°55'56"E	S											MZ014418
16	3694**	May-2019	chicken poop	52°46'N 82°37'E	S											MW969510
<b><i>S. devriesei</i> (1/4)</b>																
17	700	Apr-2010	urine	54°51'02"N 83°06'16"E	R						E					MZ014419
<b><i>S. epidermidis</i> (33/132) 25%</b>																
18	301	Jul-2009	skin, outpatient	55°03'N 82°57'E	S											OR856620
19	1380	Sep-2011	dental plaque	54°51'02"N 83°06'16"E	S											MZ049534
20	1548	Feb-2013	diabetic	55°02'13"N	R		FOX				E					MZ027385

[illegible]

49	4465	Nov-2021	throat swab	54°51'02"N 83°06'16"E	MDR	AK	FOX			DA	E					
50	6765	Jun-2022	urine	55°03'N 82°57'E	R		P, FOX				E					OR856632
<i>S. equorum</i> (2/4)																
51	3183**	Sep-2017	cloaca flush, red-headed duck	53°44'43"N 77°52'54"E	S											MW969511
52	3636**	Feb-2019	vaginal smear, dog	54°58'38"N 83°02'42"E	S											MW979971
<i>S. haemolyticus</i> (3/28) 10.7%																
53	1437**	Nov-2012	excrement, chinchilla	54°50'57"N 83°06'13"E	MDR	CN	FOX				E					MW979956
54	1700	Dec-2013	diabetic foot ulcer	55°02'13"N 82°53'00"E	MDR	CN	FOX				E					MZ027398
55	3413	Jul-2018	oral mucosa, ventilation	54°51'07"N 83°05'29"E	MDR	AK, CN	FOX				E					MZ027399
<i>S. lugdunensis</i> (2/3)																
56	4459	Jul-2021	nasal swab	54°51'02"N 83°06'16"E	R		FOX									OQ346157
57	4461	Jul-2021	nasal swab	54°51'02"N 83°06'16"E	S											OQ346157
<i>S. ureilyticus</i> (1/1)																
58	1966	Oct-2014	skin, crack between fingers	54°51'02"N 83°06'16"E	MDR		P	CIP, LEV		DA						OQ346151

The number of St\_134-sensitive strains among tested strains is indicated in parentheses.

\*– Collection of Extremophile Microorganisms and Type Cultures (CEMTC) of ICBFM SB RAS; \*\*– strains isolated from pets; \*\*\*– host strain for the St\_134 phage.

Abbreviations: MDR – Multi Drug Resistance; R – Resistance; S – Sensitive; AK – Amikacin; C – Chloramphenicol; CIP – Ciprofloxacin, CN – Gentamicin; DA – Clindamycin; FOX – Cefoxitin; E – Erythromycin; LEV – Levofloxacin; LNM – Lincomycin; P – Penicillin; SXT – Trimethoprim/sulfamethoxazole; TE – Tetracycline; VA – Vancomycin.

Table S2. Open reading frames (ORFs) found in the genome of the St\_134 phage

ORF	Location	Strand	Function
1	St_134_131_499	+	tail tip protein
2	St_134_516_731	+	hypothetical protein
3	St_134_746_1138	+	single stranded DNA-binding protein
4	St_134_1263_1472	+	hypothetical protein
5	St_134_1476_1721	+	hypothetical protein
6	St_134_1711_2940	+	receptor binding anchor protein; hydrolase
7	St_134_2951_3454	+	5' terminal protein
8	St_134_3513_4772	+	terminase
9	St_134_4830_7121	+	DNA polymerase
10	St_134_8655_7234	-	tail tip lysin

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11	St_134_9070_8648	-	holin
12	St_134_10844_9078	-	tail knob protein
13	St_134_11707_10904	-	head fiber (Fib)protein
14	St_134_12595_11708	-	endolysin
15	St_134_14461_12632	-	receptor binding protein
16	St_134_15310_14474	-	tail stem/collar protein
17	St_134_16310_15303	-	portal protein
18	St_134_17548_16331	-	major capsid protein
19	St_134_17751_17560	-	capsid lining protein
20	St_134_18084_17764	-	portal-proximal core protein

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