

1 **Additional File 1: Table. Strains used in this study.**

Species (original designation)	SBSEC (sub)species according to <i>groEL</i> sequence	Strain(s)	Country and place of origin	Isolation source	GenBank accession number	Reference
<i>Enterococcus faecalis</i>	<i>n/a</i>	JH2-2	UK	clinical specimen	AXOI01000000	[1]
<i>Lactobacillus rhamnosus</i>	<i>n/a</i>	GG (ATCC53103)	USA	feces of a healthy human	AP011548	[2]
<i>Lactobacillus reuteri</i>	<i>n/a</i>	DSM20016 ^T	Germany	intestine of adult		[3]
<i>Lactobacillus plantarum</i>	<i>n/a</i>	WCFS1	UK	human saliva, single colony isolate of NCIMB8826,	AL935263	[4]
<i>Lactobacillus plantarum</i>	<i>n/a</i>	NZ7114	see WCFS1	sortaseA knockout mutant of WCFS1		[5]
<i>S. alactolyticus</i>	<i>S. alactolyticus</i>	DSM20728 ^T	UK	pig intestine		[6]
<i>S. bovis</i>	<i>S. equinus</i>	ATCC33317 ^T DSM20480 ^T	UK	cow dung	AUZG01000000	[7, 8]
<i>S. bovis</i>	<i>Sgp</i>	ATCC700338	NY, USA	synovial fluid from the knee of a 70 year-old man with septic arthritis	AEEL00000000	[9], HMP ¹⁾
<i>S. bovis</i>	<i>S. lutetiensis</i>	ANSES 1366	Gers, Midi-Pyrenees, France	mastitis milk		[10]
<i>S. bovis</i>	<i>Sii</i> : 16S match to <i>S. infantarius</i> group; MLST within <i>Sii</i> <i>groEL</i> = match to <i>Sgm</i>	J2 40-2	Bangladesh	fermented cow milk		[11]
<i>S. equinus</i>	<i>S. equinus</i>	ATCC9812 ^T DSM20558 ^T	UK	horse feces	GL698429	[12]
<i>S. equinus</i>	<i>S. equinus</i>	HC5	Ithaca, NY; USA	cow rumen	JPGC01000000	[13]
<i>S. equinus</i>	<i>S. equinus</i>	HSISB1	The Netherlands	ileostomy effluent	ASKA01000000	[14]
<i>S. equinus</i>	<i>S. equinus</i>	JB1	Davis, CA, USA	cow rumen	AUZH01000000	[15, 7]
<i>S. equinus</i>	<i>S. equinus</i>	SN033	New Zealand	deer feces	NZ_ATWZ01000000	2)

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<i>S. equinus</i>	<i>S. equinus</i>	B315	New Zealand	cow rumen	AUJD01000000	2)
<i>S. equinus</i>	<i>S. equinus</i>	2B	Scotland	sheep rumen	JNKQ01000000	2)
<i>Sii</i>	<i>Sii</i>	CJ251, CJ18, CJ246, CJ248, CJ241, CJi0763,	Kenya	fermented camel milk	CJ18: CP003295	[16, 17]
<i>Sii</i>	<i>Sii</i>	CJ244, CJi0210, CJ249, CJi0271, CJ76, 150A	Somalia	fermented camel milk		[16]
<i>Sii</i>	<i>Sii</i>	AB2B2-5, AV2A(1), AV3B(1), AZV1B(3), B2VA2-2, BEV4C(1), L2VB3-3, LV1A(2), P2VC1-1, P2VC1-2,	Côte d'Ivoire	fermented cow milk		[17]
<i>Sii</i>	<i>Sii</i>	11FA-1, 11GY-2, 13AF, 13AY-1, 3AG-1, 6BY-11B, 6C,	Mali	fermented cow milk		[18]
<i>Sii</i>	<i>S. equinus</i>	CCUG4214	UK	human infant feces		[19, 20]
<i>Sii</i>	<i>Sii</i>	CCUG35647	Sweden	human with acute lymphatic leukemia ³⁾		http://www.cug.se
<i>Sii</i>	<i>Sii</i>	CCUG38214	Sweden	human blood, mechanical valve, asthma		http://www.cug.se
<i>Sii</i>	<i>Sii</i>	CCUG38224	Sweden	human ³⁾		http://www.cug.se
<i>Sii</i>	<i>Sii</i>	CCUG43820 ^T	UK	human infant feces		[21]
<i>Sii</i>	<i>Sii</i>	CCUG43821	UK	frozen peas		[22]
<i>S. lutetiensis</i>		CCUG43822	UK	human infant feces		[22]
<i>Sii</i>	<i>Sii</i>	CCUG44960	Sweden	human blood, 78-year old man		http://www.cug.se
<i>Sii</i>	<i>Sii</i>	CCUG46015	Sweden	human ³⁾		http://www.cug.se
<i>S. infantarius</i> group	<i>S. lutetiensis</i>	SA61, SM51, TA83	Ethiopia	human infant feces		[23]
<i>Sii</i>	<i>S. lutetiensis</i>	12290	Israel	human blood		[24]

Species (original designation)	SBSEC (sub)species according to <i>groEL</i> sequence	Strain(s)	Country and place of origin	Isolation source	GenBank accession number	Reference
<i>Sii</i>	<i>Sii</i>	5147432-1, 5334570	Israel	human blood		[24]
<i>Sii</i>	<i>Sii</i>	P-24	Spain	colonic polyps		[25]
<i>Sgg</i>	<i>Sgg</i>	ATCC BAA2069	Germany	human blood, infective endocarditis	FR824043	[26]
<i>Sgg</i>	<i>Sgg</i>	ATCC43143	Belgium	human blood	AP012053	[27]
<i>Sgg</i>	<i>Sgg</i>	DSM16831 ^T	Australia	koala bear feces		[28]
<i>Sgg</i>	<i>Sgg</i>	LMG17956	Netherlands	calf	CCBC01000000	[29]
<i>Sgg</i>	<i>Sgg</i>	UCN34	France	human blood, infective endocarditis	NC_013798	[30]
<i>Sgg</i>	<i>Sgg</i>	TX20005	USA	heart, human	NZ_GL39173	HMP ¹⁾
<i>Sgm</i>	<i>Sgm</i>	DSM15879 ^T	Greece	Greek kasseri cheese		[31]
<i>Sgm</i>	<i>Sgm</i>	135D, CJi0257	Somalia	fermented camel milk		[16]
<i>Sgm</i>	<i>Sgm</i>	28F, 34I	Mali	fermented cow milk		[18]
<i>Sgm</i>	<i>Sgm</i>	PV2(3)	Côte d'Ivoire	fermented cow milk		[17]
<i>Sgp</i>	<i>Sgp</i>	ATCC43144	Belgium	human blood	AP012054	[27]
<i>Sgp</i>	<i>Sgp</i>	DSM15351 ^T	France	human cerebrospinal fluid		[32]
<i>S. lutetiensis</i>	<i>S. lutetiensis</i>	033	China	infant feces	CP003025	[33]
<i>S. thermophilus</i>	n/a	DSM20259	Weihestephan, Germany	yoghurt		http://www.dsmz.de

2 n/a: not applicable; 1) HMP: Human Microbiome Project; 2) DOE Joint Genome Institute - The Hungate 1000. A catalogue of reference
3 genomes from the rumen microbiome. 3) body site/material of strain isolation (e.g. feces or blood) unknown.

4 **References Supporting Additional File 1**

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74