

S2 Table. Strains isolated from honeybee guts

Organism	Isolated from	16S sequence accession number	Phylum or class, order	Media allowing growth ^a	Growth under O ₂	Cell morphology
<i>Gilliamella apicola</i> strain IHP.2ste	bee #2	MH782109	γ -proteobacteria, Orbales	<u>HIB</u>	no	rod-shaped, Gram -
<i>Snodgrassella alvi</i> strain IHP.IC1	bee #5	MH782110	β -proteobacteria, Neisseriales	<u>HIB</u> ,LB	no	rod-shaped, Gram -
<i>Snodgrassella alvi</i> strain IHP.IO2	bee #6	MH782111				
<i>Bifidobacterium</i> sp. strain IHP.3T2CH	bee #3	MH782112	Actinobacteria, Bifidobacteriales	<u>HIB</u> ,MRS	+	rod-shaped, Gram +
<i>Bifidobacterium</i> sp. strain IHP.9OP	bee #9	MH782113				
<i>Bifidobacterium</i> sp. strain IHP.IC3	bee #5	MH782114				
<i>Lactobacillus kunkeei</i> strain IHP.7AA	bee #7	MH782115	Firmicutes, Lactobacillales	<u>HIB</u> , <u>MRS</u>	++	rod-shaped, Gram +
<i>Lactobacillus kunkeei</i> strain IHP.B1	bee #1	MH782116				
<i>Lysinibacillus</i> sp. strain IHP.3T2B	bee #3	MH782117	Firmicutes, Bacillales	<u>HIB</u> ,MRS,LB	+++	rod-shaped, Gram + ^b
<i>Lysinibacillus</i> sp. strain IHP.4GCCB	bee #4	MH782118				
<i>Staphylococcus</i> sp. strain IHP.4GCCA	bee #4	MH782119	Firmicutes, Bacillales	<u>HIB</u> ,MRS,LB	+	cocci, Gram +
<i>Staphylococcus</i> sp. strain IHP.B3	bee #1	MH782120				
<i>Hafnia</i> sp. strain IHP.92DB ^c	bee #9	MH782121	γ -proteobacteria, Enterobacteriales	<u>HIB</u> , <u>MRS</u> ,LB	+++	rod-shape, Gram -

^a Medium with the best growth is underlined. HIB: Heart Infusion Broth. MRS: De Man, Rogosa and Sharpe (here supplemented with fructose and cystein). LB: Lysogeny Broth

^b Strains forming big bacilli with central Gram positive coloration but lighter ends

^c Colonies grown on agar media had a "flowery" smell