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Supplementary material

SUPPLEMENTARY MATERIAL TO

Probiotic potential of *Lactobacillus fermentum* G-4 originating from the meconium of newborns

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TABLE S-I. Phenotypic characteristics of isolate *L. fermentum* G-4; ±: weak growth

Test	Result
Gram staining	Gram positive rods
Colony morphology	White small colonies
Oxygen preferences	
Growth in aerobic conditions	+
Growth in anaerobic conditions	+
Growth in medium with NaN_3 (0.02 %)	+
Osmotic pressure	
Growth with 2.0 % NaCl	+
Growth with 4.0 % NaCl	+
Growth with 6.5 % NaCl	±
Production of gas from glucose	+
Production of ammonia from arginine	+
Coagulase test	+
Catalase test	–
Hemolysis test	–
Growth at pH 4	+
Temperature range	
15 °C	+
37 °C	+
40 °C	+
45 °C	+
50 °C	–

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TABLE S-II. *L. fermentum* G-4 API 50 CH profile

No	Substrate	Result
Control	/	–
1	GLY – Glycerol	–
2	ERY – Erythritol	–
3	DARA – D-Arabinose	–
4	LARA – L-Arabinose	–
5	RIB – Ribose	+
6	DXYL – D-Xylose	–
7	LXYL – L-Xylose	–
8	ADO – Adonitol	–
9	MDX – Methyl β-D-xyloxide	–
10	GAL – Galactose	+
11	GLU – D-Glucose	+
12	FRU – D-Fructose	+
13	MNE – D-Mannose	+
14	SBE – L-Sorbose	–
15	RHA – Rhamnose	–
16	DUL – Dulcitol	–
17	INO – Inositol	–
18	MAN – Mannitol	–
19	SOR – Sorbitol	–
20	MDM – Methyl α-D-mannoside	–
21	MDG –Methyl α-D-glucoside	–
22	NAG – *N*-Acetylglucosamine	+
23	AMY – Amygdalin	–
24	ARB – Arbutine	–
25	ESC – Esculine	+
26	SAL – Salicine	–
27	CEL – Cellobiose	+
28	MAL – Maltose	+
29	LAC – Lactose	+
30	MEL – Mellbiose	+
31	SAC – Saccharose	+
32	TRE – Trehalose	–
33	INU – Inulin	–
34	MLZ – Melezitose	–
35	RAF – D-raffinose	+
36	AMD – Starch	–
37	GLYG – Glycogene	–
38	XLT – Xylitol	–
39	GEN – β-Gentiobiose	–
40	TUR – D-Turanose	–
41	LYX – L-Xylose	–
42	TAG – D-Tagatose	–
43	DFUC – D-Fucose	–

TABLE S-II. Continued

No	Substrate	Result
44	LFUC – L-Fucose	–
45	DARL – D-Arabitol	–
46	LARL – L-Arabitol	–
47	GNT – Gluconate	+
48	2KG – 2-ketogluconate	–
49	5KG – 5-ketogluconate	–

TABLE S-III. *L. fermentum* G-4 complete sequence of the *16S rRNA* gene

GGCCGACGTGGGCTATCTGCAGTCGAAGCGTTGGCCCATTGATTGATGGTGCTTG
CACCTGATTGATTTTGGTCGCCAACGAGTGGCGGACGGGTGAGTAACACGTAGGT
AACCTGCCCAGAAGCGGGGGACAACATTTGGAAACAGATGCTAATACCGCATAA
CAACGTTGTTCGCATGAACAACGCTTAAAAGATGGCTTCTCGCTATCACTTCTGGA
TGGACCTGCGGTGCATTAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGATGAT
GCATAGCCGAGTTGAGAGACTGATCGGCCACAATGGGACTGAGACACGGCCCAT
ACTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGGCGCAAGCCTGATG
GAGCAACACCGCGTGAGTGAAGAAGGGTTTCGGCTCGTAAAGCTCTGTTGTTAAA
GAAGAACACGTATGAGAGTAACTGTTCATACGTTGACGGTATTTAACCAGAAAGT
CACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTATCC
GGATTTATTGGGCGTAAAGAGAGTGCAGGCGGTTTTCTAAGTCTGATGTGAAAGC
CTTCGGCTTAACCGGAGAAGTGCATCGGAAACTGGATAACTTGAGTGCAGAAGA
GGGTAGTGGAACTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACAC
CAGTGGCGAAGGCGGCTACCTGGTCTGCAACTGACGCTGAGACTCGAAAGCATG
GGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTA
GGTGTTGGAGGGTTTCCGCCCTTCAGTGCCGGAGCTAACGCATTAAGCACTCCGC
CTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCAC
AAGCGGTGGAGCATGTGGTTTAATTCGAAGCTACGCGAAGAACCTTACCAGGTCT
TGACATCTTGCGCCAACCCTAGAGATAGGGCGTTTCCTTCGGGAACGCAATGACA
GGTGGTGCATGGTCGTCGTCAGCTCGTGTCGTGAGATGTTGGGTTAAGTCCCGCA
ACGAGCGCAACCCTTGTTACTAGTTGCCAGCATTAAGTTGGGCACTCTAGTGAGA
CTGCCGGTGACAAACCGGAGGAAGGTGGGGACGACGTCAGATCATCATGCCCCTT
ATGACCTGGGCTACACACGTGCTACAATGGACGGTACAACGAGTCGCGAACTCGC
GAGGGCAAGCAAATCTCTTAAAACCGTTCTCAGTTCGGACTGCAGGCTGCAACTC
GCCTGCACGAAGTCGGAATCGCTAGTAATCGCGGATCAGCATGCCGCGGTGAATA
CGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTTTGTAACACCCA
AAGTCGGTGGGGTATCCTTTTAGGAGCCAGCCGCCTAAGGTGGGACAGAGATTAG
GGAAGTCAACAGAGCGCCGAAAA