

## Supplementary Materials

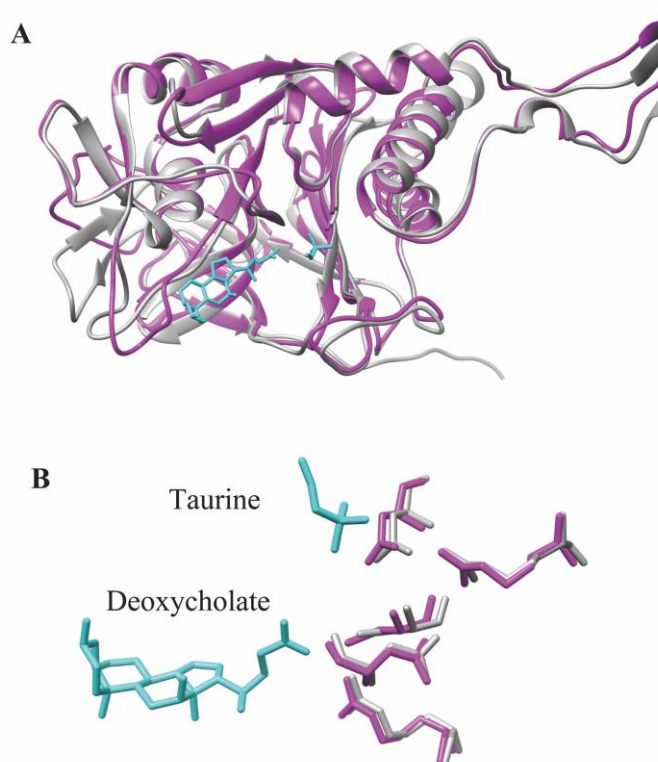
# Identification of Bile Salt Hydrolase and Bile Salt Resistance in a Probiotic Bacterium *Lactobacillus gasseri* JCM1131<sup>T</sup>

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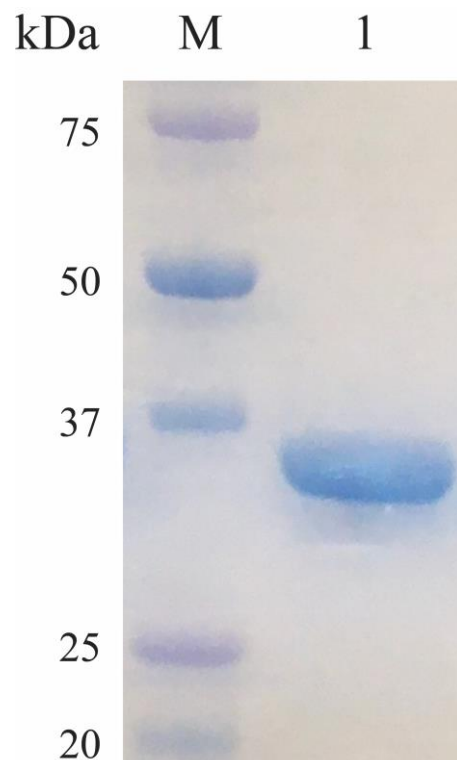
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**Figure S1.** Structural analyses of LagBSH. Overall (A) and active site (B) structural superposition of LagBSH (magenta) with CpBSH from *Clostridium perfringens* 13 (light gray; PDB entry 2BJF). Taurine and deoxycholate molecules were shown in cyan stick.



**Figure S2.** SDS-PAGE analysis of purified LagBSH. After nickel affinity chromatography, purified protein was loaded on 12% SDS-PAGE gel (Bio-Rad). Lane M, molecular size-marker (Precision Plus Protein™ Dual Color Standards, 10-250 kDa); lane 1, LagBSH.

**Table S1.** The BSH sequence homology among *Lactobacillus* species.

Species	Strain	Accession No	Amino acid sequence homology (%)
			LagBSH
<i>L. acidophilus</i>	NCFM	YP_193782	33.33
<i>L. acidophilus</i>	NCFM	AAV42923	35.00
<i>L. animalis</i>	unknown	WP_010690294	37.30
<i>L. buchneri</i>	NRRL B-30929	AEB72500	29.69
<i>L. fermentum</i>	NCDO 394	AEZ06356	29.06
<i>L. gasseri</i>	FR4	WP_020806888	39.94
<i>L. johnsonii</i>	PF01	ABQ01980	93.35
<i>L. johnsonii</i>	100-100	AF297873	39.20
<i>L. johnsonii</i>	100-100	AAC34381	93.99
<i>L. johnsonii</i>	NCC533	AAS09178	38.58
<i>L. johnsonii</i>	NCC533	AAS08969	32.91
<i>L. johnsonii</i>	NCC533	AAS08038	93.67
<i>L. plantarum</i>	MBUL69	ACG76118	38.05
<i>L. plantarum</i>	WCFS1	CCC80500	37.74
<i>L. plantarum</i>	LP80	S51638	37.74
<i>L. plantarum</i>	ST-III	ADO00098	37.74
<i>L. plantarum</i>	ST-III	ADN97280	30.32
<i>L. plantarum</i>	ST-III	ADN99975	30.67
<i>L. plantarum</i>	ST-III	ADN99333	27.84
<i>L. reuteri</i>	100-23	EDX41535	36.62
<i>L. salivarius</i>	UCC118	YP_536688	37.07
<i>L. salivarius</i>	NRRL B-30514	JX120368	37.38
<i>L. salivarius</i>	JCM1046	ACL98204	37.03