

Table S1. Origin of LAB isolates used in this study

LAB	Origin	LAB	Origin	LAB	Origin	LAB	Origin
A1.1	Fermented sausage	A9.9	Fermented sausage	A19.7	Fermented sausage	A31.3	Fermented sausage
A1.2	Fermented sausage	A10.1	Fermented sausage	A19.8	Fermented sausage	A31.4	Fermented sausage
A1.3	Fermented sausage	A10.2	Fermented sausage	A20.1	Fermented sausage	A31.5	Fermented sausage
A1.4	Fermented sausage	A10.3	Fermented sausage	A20.2	Fermented sausage	A31.6	Fermented sausage
A1.5	Fermented sausage	A10.4	Fermented sausage	A20.3	Fermented sausage	A32.1	Fermented sausage
A1.6	Fermented sausage	A10.5	Fermented sausage	A20.4	Fermented sausage	A32.2	Fermented sausage
A1.7	Fermented sausage	A10.6	Fermented sausage	A20.5	Fermented sausage	A32.3	Fermented sausage
A2.1	Fermented sausage	A10.7	Fermented sausage	A21.1	Fermented sausage	A33.1	Fermented sausage
A2.2	Fermented sausage	A10.8	Fermented sausage	A21.2	Fermented sausage	A33.2	Fermented sausage
A2.3	Fermented sausage	A10.9	Fermented sausage	A21.3	Fermented sausage	A33.3	Fermented sausage
A2.4	Fermented sausage	A10.10	Fermented sausage	A21.4	Fermented sausage	A33.4	Fermented sausage
A2.5	Fermented sausage	A10.11	Fermented sausage	A22.1	Fermented sausage	A33.5	Fermented sausage
A3.1	Fermented sausage	A11.1	Fermented sausage	A22.2	Fermented sausage	A33.6	Fermented sausage
A3.2	Fermented sausage	A11.2	Fermented sausage	A22.3	Fermented sausage	A33.7	Fermented sausage
A3.3	Fermented sausage	A11.3	Fermented sausage	A22.4	Fermented sausage	A34.1	Fermented sausage
A3.4	Fermented sausage	A11.4	Fermented sausage	A22.5	Fermented sausage	A34.2	Fermented sausage
A3.5	Fermented sausage	A11.5	Fermented sausage	A22.6	Fermented sausage	A34.3	Fermented sausage
A3.6	Fermented sausage	A11.6	Fermented sausage	A23.1	Fermented sausage	A34.4	Fermented sausage
A3.7	Fermented sausage	A11.7	Fermented sausage	A23.2	Fermented sausage	A34.5	Fermented sausage
A4.1	Fermented sausage	A11.8	Fermented sausage	A23.3	Fermented sausage	A35.1	Fermented sausage
A4.2	Fermented sausage	A12.1	Fermented sausage	A23.4	Fermented sausage	A35.2	Fermented sausage
A4.3	Fermented sausage	A12.2	Fermented sausage	A23.5	Fermented sausage	A35.3	Fermented sausage
A4.4	Fermented sausage	A12.3	Fermented sausage	A23.6	Fermented sausage	A35.4	Fermented sausage
A4.5	Fermented sausage	A12.4	Fermented sausage	A23.7	Fermented sausage	A35.5	Fermented sausage
A4.6	Fermented sausage	A12.5	Fermented sausage	A24.1	Fermented sausage	A35.6	Fermented sausage
A4.7	Fermented sausage	A12.6	Fermented sausage	A24.2	Fermented sausage	A36.1	Fermented sausage
A4.8	Fermented sausage	A12.7	Fermented sausage	A24.3	Fermented sausage	A36.2	Fermented sausage
A4.9	Fermented sausage	A12.8	Fermented sausage	A24.4	Fermented sausage	A36.3	Fermented sausage
A4.10	Fermented sausage	A12.9	Fermented sausage	A24.5	Fermented sausage	A36.4	Fermented sausage
A4.11	Fermented sausage	A12.10	Fermented sausage	A24.6	Fermented sausage	A36.5	Fermented sausage
A5.1	Fermented sausage	A12.11	Fermented sausage	A24.5	Fermented sausage	A36.6	Fermented sausage
A5.2	Fermented sausage	A12.12	Fermented sausage	A25.1	Fermented sausage	A36.7	Fermented sausage
A5.3	Fermented sausage	A13.1	Fermented sausage	A25.2	Fermented sausage	A36.8	Fermented sausage
A5.4	Fermented sausage	A13.2	Fermented sausage	A25.3	Fermented sausage	A36.9	Fermented sausage
A5.5	Fermented sausage	A13.3	Fermented sausage	A25.4	Fermented sausage	A36.10	Fermented sausage
A5.6	Fermented sausage	A13.4	Fermented sausage	A25.5	Fermented sausage	K34	Fermented sausage
A5.7	Fermented sausage	A13.5	Fermented sausage	A25.6	Fermented sausage	Q42	Cheese
A5.8	Fermented sausage	A13.6	Fermented sausage	A26.1	Fermented sausage	Q43	Cheese
A5.9	Fermented sausage	A13.7	Fermented sausage	A26.2	Fermented sausage	Q43	Cheese
A5.10	Fermented sausage	A13.8	Fermented sausage	A26.3	Fermented sausage	DT016	Lettuce
A6.1	Fermented sausage	A14.1	Fermented sausage	A26.4	Fermented sausage	SB83	Seafood
A6.2	Fermented sausage	A14.2	Fermented sausage	A26.5	Fermented sausage	ALP7	Shellfish
A6.3	Fermented sausage	A14.3	Fermented sausage	A26.6	Fermented sausage	R23	Arugula
A6.4	Fermented sausage	A15.1	Fermented sausage	A26.7	Fermented sausage	CFF4	Cambodian fermented fish
A7.1	Fermented sausage	A15.2	Fermented sausage	A27.1	Fermented sausage	CFF5	Cambodian fermented fish
A7.2	Fermented sausage	A15.3	Fermented sausage	A27.2	Fermented sausage	CFF51	Cambodian fermented fish
A7.3	Fermented sausage	A15.4	Fermented sausage	A27.3	Fermented sausage	CFF202	Cambodian fermented fish
A7.4	Fermented sausage	A15.5	Fermented sausage	A27.4	Fermented sausage	ST153	Smoked salmon
A7.5	Fermented sausage	A16.1	Fermented sausage	A27.5	Fermented sausage	SS100.2	Smoked salmon
A7.6	Fermented sausage	A16.2	Fermented sausage	A28.1	Fermented sausage	SS102.1	Smoked salmon
A7.7	Fermented sausage	A16.3	Fermented sausage	A28.2	Fermented sausage	SS104.1	Smoked salmon
A7.8	Fermented sausage	A16.4	Fermented sausage	A28.3	Fermented sausage	SS107.1	Smoked salmon
A7.9	Fermented sausage	A16.5	Fermented sausage	A28.4	Fermented sausage	SS107.2	Smoked salmon
A7.10	Fermented sausage	A16.6	Fermented sausage	A28.5	Fermented sausage	SS110	Smoked salmon
A7.11	Fermented sausage	A16.7	Fermented sausage	A28.6	Fermented sausage	SS114	Smoked salmon
A8.1	Fermented sausage	A16.8	Fermented sausage	A29.1	Fermented sausage	SS117	Smoked salmon
A8.2	Fermented sausage	A17.1	Fermented sausage	A29.2	Fermented sausage	SS118	Smoked salmon
A8.3	Fermented sausage	A17.2	Fermented sausage	A29.3	Fermented sausage	SS121	Smoked salmon
A8.4	Fermented sausage	A18.1	Fermented sausage	A29.4	Fermented sausage	SS126.2	Smoked salmon
A8.5	Fermented sausage	A18.2	Fermented sausage	A29.5	Fermented sausage	SS127	Smoked salmon
A8.6	Fermented sausage	A18.3	Fermented sausage	A29.6	Fermented sausage	SS128	Smoked salmon
A8.7	Fermented sausage	A18.4	Fermented sausage	A29.7	Fermented sausage	SS139	Smoked salmon
A9.1	Fermented sausage	A18.5	Fermented sausage	A29.8	Fermented sausage	SS144	Smoked salmon
A9.2	Fermented sausage	A18.6	Fermented sausage	A30.1	Fermented sausage	SS148	Smoked salmon
A9.3	Fermented sausage	A19.1	Fermented sausage	A30.2	Fermented sausage	SS149	Smoked salmon
A9.4	Fermented sausage	A19.2	Fermented sausage	A30.3	Fermented sausage	SS165	Smoked salmon
A9.5	Fermented sausage	A19.3	Fermented sausage	A30.4	Fermented sausage	SS167	Smoked salmon
A9.6	Fermented sausage	A19.4	Fermented sausage	A30.5	Fermented sausage	SS168	Smoked salmon
A9.7	Fermented sausage	A19.5	Fermented sausage	A31.1	Fermented sausage	SS170	Smoked salmon
A9.8	Fermented sausage	A19.6	Fermented sausage	A31.2	Fermented sausage	SS195	Smoked salmon