

Accession numbers of the data sets used in the study.

Complete genome analysis

CP053477.1 - *Staphylococcus warneri* strain WB224 chromosome, complete genome
CP038242.1 - *Staphylococcus warneri* strain GD01 chromosome, complete genome
CP033098.1 - *Staphylococcus warneri* strain SWO chromosome, complete genome
CP061041.1 - *Staphylococcus warneri* strain WS479 chromosome, complete genome
CP054017.1 - *Staphylococcus warneri* strain FDAARGOS_754 chromosome, complete genome
CP118973.1 - *Staphylococcus warneri* strain DSM 20316 chromosome, complete genome
CP049802.1 - *Staphylococcus warneri* strain Cap 100.1 chromosome, complete genome
CP118789.1 - *Staphylococcus warneri* strain 7068 chromosome, complete genome
CP118794.1 - *Staphylococcus warneri* strain 7067 chromosome, complete genome
CP134464.1 - *Staphylococcus warneri* strain 2023.05 chromosome, complete genome
CP032159.1 - *Staphylococcus warneri* strain 22.1 chromosome, complete sequence
AJ938182.1 - *Staphylococcus aureus* RF122, complete genome

Whole genome phylogenetic analysis

LATV000000000.1 - *Staphylococcus cohnii* strain 532, whole genome
CP007601.1 - *Staphylococcus capitis* strain AYP1020 chromosome, complete sequence
NZ_WBME000000000.1 - *Staphylococcus epidermidis* ATCC 12228, whole genome
NZ_ACFR000000000.1 - *Staphylococcus capitis* SK14, whole genome
NZ_VDSH000000000.1 - *Staphylococcus warneri* SG1 strain DE0436, whole genome
NZ_LORZ000000000.2 - *Staphylococcus capitis* strain FDAARGOS_173, whole genome
NZ_ALWK000000000.1 - *Staphylococcus arlettae* CVD059, whole genome
NC_007168.1 - *Staphylococcus haemolyticus* JCSC1435, complete genome
NC_002976.3 - *Staphylococcus epidermidis* RP62A, complete sequence
NZ_ACRH000000000.1 - *Staphylococcus caprae* C87, whole genome

16S rRNA gene analysis

MK430917.1 -*Proteus mirabilis* strain P1 16S ribosomal RNA gene,
AJ936959.1 -*Staphylococcus* sp. SOMBO56 partial 16S rRNA gene
MK967125.1- *Staphylococcus* sp. strain 152 16S ribosomal RNA gene
KT003275.1 -*Staphylococcus pasteurii* strain HN-35 16S ribosomal RNA gene
MZ964592.1- *Staphylococcus warneri* strain ANSNAS11 16S ribosomal RNA gene,
HM755586.1 -*Staphylococcus* sp. C-D-MA3 16S ribosomal RNA gene
MG162684.1- *Staphylococcus* sp. strain 103 16S ribosomal RNA gene,
OR347526.1 -*Staphylococcus* sp. strain WF4-8 16S ribosomal RNA gene
MZ964595.1 -*Staphylococcus warneri* strain ANSNAS14 16S ribosomal RNA gene
EU807751.1 -*Staphylococcus* sp. VITS-3 16S ribosomal RNA gene
HM130543.1 -*Staphylococcus pasteurii* strain Sp-12 16S ribosomal RNA gene
KU671206.1 -*Staphylococcus* sp.MT-Y-S2 16S ribosomal RNA gene
KX946173.1 -*Staphylococcus warneri* strain S-100 16S ribosomal RNA gene
KX946172.1 -*Staphylococcus warneri* strain S-66 16S ribosomal RNA gene
KX946170.1 -*Staphylococcus warneri* strain S-38 16S ribosomal RNA gene
KT986181.1 -*Staphylococcus warneri* strain Xmb055 16S ribosomal RNA gene