Additional File 3: Table. MLST candidate loci used in this study. All 30 candidate loci which were used in this study were selected from literature and MLST.net (http://www.mlst.net/). Conserved housekeeping genes were selected on the basis of maximal nucleotide divergence for intraspecies differentiation. All loci which are marked with an asterisk were used for the final SBSEC MLST scheme.

candidate loci	MLST and loci originally selected for organism	references
3-phosphoshikimate-3-carboxyvinyltransferase	*Sii*	this study
glucokinase*	*S. pneumoniae*	[1]
α-keto-β-hydroxylacid reductoisomerase	salivarius group	[2]
amino acid ABC transporter	group B streptococci	[3]
aspartate kinase	*S. suis*	[4]
D-alanine-D-alanine ligase*	*S. uberis*	[5]
DNA polymerase III	salivarius group	[6]
endopeptidase O	salivarius group	[6]
glutamate racemase	*S. pyogenes*	[7]
glutamine synthetase*	group B streptococci	[3]
L-serine dehydratase, β subunit	group B streptococci	[3]
L-serine dehydratase, α subunit	group B streptococci	[3]
groEL, hsp60 chaperone	*S. uberis*	[8]
methionine aminopeptidase	*Sii*	this study
DNA mismatch repair ATPase*	*S. suis*	[4]
mismatch repair ATPase*	*Sii*	this study
orotate phosphoribosyltransferase*	salivarius group	[2]
peroxidase resistance gene	*S. pneumoniae*	[1]
phenylalanyl tRNA synthetase*	group B streptococci	[3]
prolyl tRNA synthetase*	*Sii*	this study
recombination protein A	*Sii*	this study
ribonucleoside-diphosphate reductase, major subunit	*S. zooepidemicus*	[9]
ribonucleoside-diphosphate reductase, minor subunit	*S. zooepidemicus*	[9]
shikimate/quinate dehydrogenase	*S. pneumoniae*	[1]
signal peptidase I	*S. pneumoniae*	[1]
threonyl tRNA synthetase*	salivarius group	[6]
thymidine kinase	*S. uberis*	[5]
transketolase	*S. vestibularis*	[6]
triosephosphate isomerase*	*S. zooepidemicus*	[9]
xanthine phosphoribosyltransferase	*S. pneumoniae*	[1]

References supporting Additional File 3

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