

Supplementary Information for

Evolution of Cariogenic Character in *Streptococcus mutans*: Horizontal Transmission of Glycosyl Hydrolase Family 70 Genes

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Supplementary Table S1| List of glycosyl hydrolase family 70 enzymes used for analysis.

Genus Species	Protein Name; Abbreviated Name	Gene Name	Accession Number	Glucan Linkage
<i>Streptococcus</i>				
<i>S. mutans</i>	GTFIGtfB	<i>gtfB</i>	D88651	α -1,3
	GTF-SI; GtfC	<i>gtfC</i>	D88652	α -1,3 & α -1,6
	GTF-S; GtfD	<i>gtfD</i>	D88653	α -1,6
<i>S. sobrinus</i>	GTFIGtfI1sob	<i>gtfI1</i>	D63570	α -1,3
	GTFIGtfI2sob	<i>gtfI2</i>	D13858	α -1,3
	GTF-T; GtfTsob	<i>gtfT</i>	AY966490	α -1,6
	Glucosyltransferase; GtfU	<i>gtfU</i>	AB089438	α -1,6
	GTF-S; GtfSdow	<i>gtfS</i>	M30943	α -1,6
<i>S. downei</i>	GTFIGtfI1dow	<i>gtfI1</i>	M17391	α -1,3
	GTFIGtfI2dow	<i>gtfI2</i>	D90213	α -1,3
	GTF-S; GtfS1cri	<i>gtfS</i>	AB026123	α -1,6
<i>S. criceti</i>	GTF-S; GtfS2cri	<i>gtfT</i>	AB026123	α -1,6
	Glucosyltransferase-I; GtfJ	<i>gtfJ</i>	Z11873	α -1,3
<i>S. salivarius</i>	Glucosyltransferase S; GtfK	<i>gtfK</i>	Z11872	α -1,6
	Glucosyltransferase; GtfL	<i>gtfL</i>	L35495	α -1,3 & α -1,6
	Glucosyltransferase; GtfM	<i>gtfM</i>	L35928	α -1,6
	Glucosyltransferase N; GtfN	<i>gtfN</i>	AF049609	α -1,6
	Glucosyltransferase; GtfP	<i>gtfP</i>	AB252650	α -1,6
<i>S. sanguinis</i>	Glucosyltransferase; GtfR	<i>gtfR</i>	AB025228	α -1,6
<i>S. oralis</i>	Glucosyltransferase; GtfG	<i>gtfG</i>	U12643	α -1,6
<i>S. gordonii</i>	Glucosyltransferase; GtfG	<i>gtfG</i>	U12643	α -1,6
<i>Leuconostoc</i>				
<i>L. mesenteroides</i>	Glucosyltransferase; DsrA	<i>dsrA</i>	U38181	α -1,6
	Glucosyltransferase; DsrB	<i>dsrB</i>	AF030129	α -1,6
	Dextranucrase; Dsrb742	<i>dsrb742</i>	AF294469	No reference
	Dextranucrase; DsrC	<i>dsrC</i>	AJ250172	No reference
	Dextranucrase; DsrD	<i>dsrD</i>	AY017384	No reference
	Dextranucrase; DsrE	<i>dsrE</i>	AJ430204	α -1,6 & α -1,2
	Dextranucrase; DsrP	<i>dsrP</i>	AY504865	No reference
	Dextranucrase; DsrR	<i>dsrR</i>	AY142210	No reference
	Dextranucrase; DsrT	<i>dsrT</i>	AB020020	No reference
	Dextranucrase; DsrX	<i>dsrX</i>	AY743959	No reference
	Dextranucrase; DEX	DEX	U81374	No reference
	Alternansucrase; Asr	<i>asr</i>	AJ250173	α -1,3 & α -1,6
	<i>Lactobacillus</i>			
<i>L. parabuchneri</i>	Glucansucrase; GTF33	None	AY697432	α -1,6
<i>L. reuteri</i>	Lr 1943; Lr1943	<i>lr1943</i>	DQ074948	No reference
	Glucansucrase; GTF55730	None	AY911856	α -1,4 & α -1,6
	Glucansucrase; GTFA	None	AY697435	α -1,4
	Glucansucrase; GTFB	None	AY697435	α -1,6
	Glucansucrase; GTFML1	<i>gtfML1</i>	AY697431	No Product
	Glucansucrase; GTFML4	<i>gtfML4</i>	AY697431	α -1,3
	Glucansucrase; GTF180	<i>gtf180</i>	AY697430	No reference
				α -1,6
<i>L. fermentum</i>	Glucansucrase; GTFKg3	<i>gtfKg3</i>	AY697433	α -1,6
<i>L. sakei</i>	Glucansucrase; GTFKg15	<i>gtfKg15</i>	AY697434	α -1,6
<i>Lactococcus</i>				
<i>L. lactis</i>	Glucosyltransferase-S; PspA	<i>pspA</i>	AE006451	α -1,6
subsp. <i>lactis</i>	Glucosyltransferase-S; PspB	<i>pspB</i>	AE006451	α -1,6

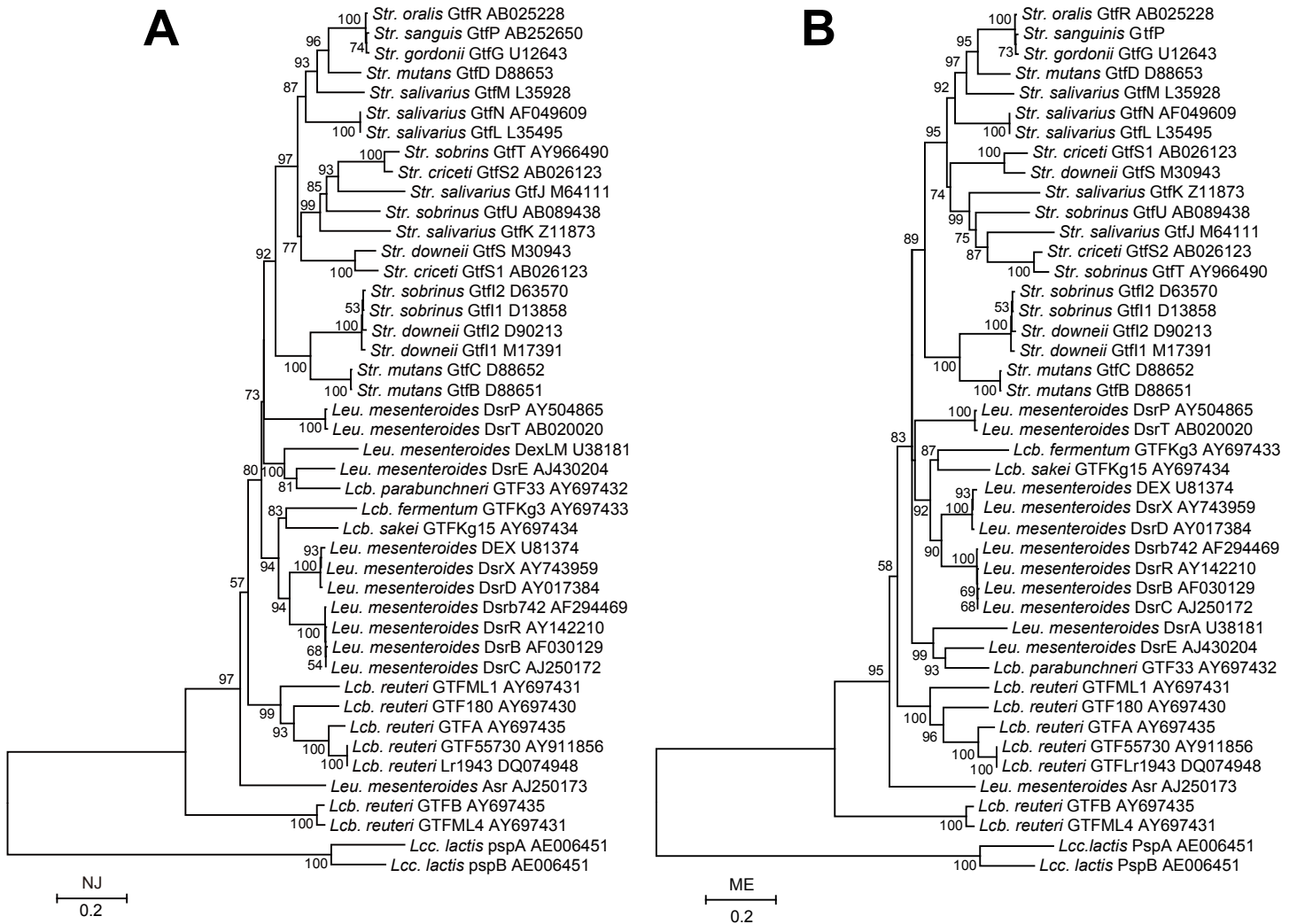


Figure S1| Phylogenetic tree of the amino acid sequences of glycosyl hydrolase family 70 enzymes constructed by the NJ (A) and the ME (B) methods. The value on each branch is the estimated confidence limit (expressed as a percentage) for the position of the branches, as determined by bootstrap analysis. Only values exceeding 50% are shown.