

Supplemental Material

TABLE S-1. The information on all the serotypes that result in same pyrosequencing pattern

Region	Sequence(5'-3') ^a	Serotype
CR177	TGCCCTTCTA	1/2, 1, 6,8,11,16,25,28,29
	TGC <u>A</u> CTTCTG ^b	2,7,9,10,14,15, 24, 27
	TGC <u>A</u> CTTCTA	3,12, 21,
	TGCGCTTGTG	4
	TGCGCTTCTG	5,13
	<u>C</u> GC <u>G</u> CTTCTG	17,18,19,23,31
	TGC <u>A</u> CTTCTT <u>T</u> G	20,22,26
	TGCCCT <u>A</u> CTA	30
	<u>C</u> GC <u>A</u> CT <u>A</u> CTA	32,34
	TGCT <u>T</u> CT <u>A</u> CTA	33
CR248	CTATCATT	1/2,2,8,11,14, 15,28,29,
	<u>T</u> TATCATT	1,10,32,33,34
	CTATC <u>A</u> CT	3,12,13,25
	<u>T</u> TAC <u>C</u> ACT	4,5,6,7,9 ,16,20,21,22,24,26,30
	<u>T</u> TATC <u>A</u> CT	17,18,19,23
	<u>T</u> TAG <u>C</u> ACT	31
	<u>T</u> TAC <u>C</u> ATT	27
CR443	CCAGACTTCTT	1/2,1,4,5,6,10,13,16,17,19,21,24,30
	CC <u>G</u> GACTTCTT	2,8,14,15
	<u>T</u> CAGACTT <u>C</u> CT	3,
	<u>T</u> CAGACTTCTT	12,18,23
	CCA <u>A</u> AC <u>T</u> CTT	7,20,22,25,26
	CCA <u>A</u> ACTT <u>C</u> CT	9

	<u>CCAGACCTCCT</u>	11,27
	<u>TCAAACCTCTT</u>	28
	<u>TCAA</u> ACTTCTT	29
	CCA <u>AA</u> CCTTTT	31
	<u>ACAAA</u> ATTCTT	32,34
	CCAGAC <u>GTTT</u>	33
CR462 AND	TTCGACAG	1/2,13,17,19
CR418	TTCGAT <u>AGG</u>	1
	TTCGAT <u>AG</u>	2,3,4,5,6,8,10,11,12,14,15,18,21,23
	<u>GTCGATAGG</u>	7
	<u>GTCGATAG</u>	9
	TTC <u>A</u> ACAG	16
	<u>GTTAATAG</u>	20,22,26
	<u>CTTTATAG</u>	24,27
	<u>GTTAATAGG</u>	25,28,31
	CTT <u>A</u> ATAG	29
	<u>TTTTACAG</u>	30
	TTCG <u>G</u> AAG	32
	TTC <u>A</u> ATAG	33
	TTC <u>A</u> GAAAG	34
16S RRNA	CAGTATTTACCG	1/2,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19, 21,22,23, 25,27,28,29,30,31
	CAGTATTTA <u>TCG</u>	20,24,26
	CAGT <u>CTTTG</u> ACG	32,34
	<u>GAGCTTTAGTGG</u>	33

^a The sequence of the target region followed the 3' end of the primer

^b The letters were labeled by underline in the primers denoted by the different bases from the sequence on the target regions of the serotype 1/2.

Fig. S-1 Comparative nucleotide sequence analysis of the target regions on 16S rDNA among 34 *S. suis* serotypes and 16 others *Streptococcus*

Note: The sign “*” represents the same nucleotide of the serotype which was in the first line. *S.pneumoniae*, *S.thermophilu*, *S.intermedius*, *S.haemolyticus* and *S.marimammalium* were abbreviated to *S.pneum*, *S.thermop*, *S.interme*, *S..haemoly* and *S.marima* respectively.

scryptype	P _{eF-106}	CR177	P _{eR-187}	CR248	P _{eR-258}	CR418	P _{eR-422}	CR443	P _{eR-453}	CR462	P _{eR-466}	P _{eR-478}
SS1/2	-TTGAAAG	-AICTTCCCGT	TCCTG	-TTACTATC	GAAAG	-GACA	TTTT	-TTCTTCAGACC	AACC	-GCITTTGA	-GACGATG	
SS01	*****	*****	****	*****T	****G**T*	****	*****	****	****	****	*****	
SS02	*****	*****A***	****	*****	******T*	****	*****G**	****	****	****	*****	
SS03	*****	*****A***	****	**C*****	******T*	****	**T*****T	*GT*	****	****	*****	
SS04	*****	G**G**G***	****	**C**C**T	******T*	****	*****	****	****	****	*****	
SS05	*****	G*****G***	****	**C**C**T	******T*	****	*****	****	****	****	*****	
SS06	*****	*****A***	****	**C**C**T	******T*	****	**C*****	****	****	****	*****	
SS07	*****	G*****A***	****	**C**C**T	****G**T*	****	****C**A**	**T*	**G*	****	G**	
SS08	*****	*****	****	*****	******T*	****	*****G**	**T*	****	****	*****	
SS09	*****	G*****A***	****	**C**C**T	******T*	****	**C***A**	**T*	**G*	****	*****	
SS10	*****	G*****A***	****	*****T	******T*	****	*****	****	****	****	*****	
SS11	*****	*****	****	*****	******T*	****	**C*****	****	****	****	*****	
SS12	*****	*****A***	****	**C*****	******T*	****	*****T	*GT*	****	****	*****	
SS13	*****	G*****G***	****	**C*****	******T*	****	*****	****	****	****	*****	
SS14	*****	G*****A***	****	*****	******T*	****	*****G**	****	****	****	*****	
SS15	*****	G*****A***	****	*****	******T*	****	*****G**	****	****	****	*****	
SS16	*****	*****	****	**C**C**T	******T*	****	*****	****	A**	****	*****	
SS17	*****	G*****G**C	****	**C*****T	******T*	****	*****	****	****	****	*****	
SS18	*****	G*****G**C	****	**C*****T	******T*	****	*****T	*GT*	****	****	*****	
SS19	*****	G*****G**C	****	**C*****T	******T*	****	*****	****	****	****	*****	
SS20	*****	GTT*****A***	****	**C**C**T	******T*	****	****C**A**	****	AT*G	****	C*	
SS21	*****	*****A***	****	**C**C**T	******T*	****	*****	****	****	****	*****	
SS22	*****	GTT*****A***	****	**C**C**T	******T*	****	****C**A**	****	AT*G	****	G*C	
SS23	*****	G*****G**C	****	**C*****T	******T*	****	*****T	*GT*	****	****	*****	
SS24	*****	G*****A***	****	**C**C**T	******T*	****	*****	*GT*	T**C	****	*****	
SS25	*****	*****	****	**C*****	****G**T*	****	****C**A**	****	AT*G	****	*****	
SS26	*****	GTT*****A***	****	**C**C**T	******T*	****	****C**A**	****	AT*G	****	C*	
SS27	*****	G*****A***	****	****C**T	******T*	****	**C*****	*GT*	T**C	****	*****	
SS28	*****	*****	****	*****	****G**T*	****	****C**A**T	****	AT*G	****	*****	
SS29	*****	*****	****	*****	******T*	****	*****A**T	*GT*	A**C	****	*****	
SS30	*****	***A*****	****	**C**C**T	******T*	****	*****	****	T**T	****	*****	
SS31	*****	G*****G**C	****	**C**G**T	****G**T*	****	***T**C**A**	**T*	AT*G	****	*****	
SS32	*****	C**CA**A**C	****	*****T	******AG	C**	****A**A**A	*G**	****C	****	T**	
SS33	*****	***A**T**C	****	*****T	******T*	A**	***T**G*****	*T*	A**	****	*****	
SS34	*****	**CA**A**C	****	*****T	******AG	G**	****A**A**A	*G**	A**C	****	T**	

Fig. S-2

Fig. S-2 Comparative nucleotide sequence analysis of the target regions for pyrosequencing on *cpn60* gene of the *S. suis* serotypes

Note: The sign “*” represents the same nucleotide of the serotype which was in the first line.