

Appendix I: Primer sequences

Primer Name	Sequence	Use
NTPase_P_L	TTTGGAAGGAATGGTTCAGG	Check for presence of SPN23F00710
NTPase_P_R	CCCTTCTTGAGCAATTTTGA	Check for presence of SPN23F00710
NTPase_N_L	CCCCACGACCACATAACTCT	Check for absence of SPN23F00710
NTPase_N_R	TTAGGGATTCCCCCAACTC	Check for absence of SPN23F00710
Lanti_L	AGGGCATTTCGTACGGTAGTG	Check for presence of lantibiotic synthesis operon
Lanti_R	AAAGGAGACATGCCACCAAG	Check for presence of lantibiotic synthesis operon
pSpn1_L	CGCCCAAGCATAGACATCTT	Check circularization of plasmid p <i>Spn1</i>
pSpn1_R	ACCAGAGCAGATCGAAGCAT	Check circularization of plasmid p <i>Spn1</i>
ICE_L_L	TCTGGTGAACGCTTGTACCTT	Check insertion site of ICE <i>Spn8140</i>
ICE_L_R	CGCCCAAGCATAGACATCTT	Check insertion site of ICE <i>Spn8140</i>
ICE_R_L	ACCAGAGCAGATCGAAGCAT	Check insertion site of ICE <i>Spn8140</i>
ICE_R_R	AGATGGTGACGATGTCTTGG	Check insertion site of ICE <i>Spn8140</i>
comYC_L	TACGATTTGCCCTCCATT	Check insertion site of group 2b prophage
Phage_L	TCAAACCAGACGGAACACTG	Check insertion site of group 2b prophage
comYC_R	GGTTTTTATCTTTGTGGCACTG	Check insertion site of group 2b prophage
Phage_R	GCAACTTGGCAAGCTAGGAC	Check insertion site of group 2b prophage
13150_L_L	TCTAACGCTTGGCAGGAAAC	Check partial deletion of ICE <i>Spn23FST81</i>
13150_L_R	TGTCCTAATATAGATTCAACGCACT	Check partial deletion of ICE <i>Spn23FST81</i>

13150_R_L	GTGCGTTGAATCTATATTAGGACA	Check partial deletion of ICES _{Spn23FST81}
13150_R_R	CACCACAGAGTGTCTTTCTTAAC	Check partial deletion of ICES _{Spn23FST81}
Tn916_att1L	GACAGACCGACACAAGCAGA	Check for insertion of Omega element
Tn916_att1R	TCACGCTTGAAGCCAAGATA	Check for insertion of Omega element
Tn916_att2L	CTACCGGTGAACCTGTTTGC	Check for insertion of Mega or Tn917 element
Tn916_att2R	GTGAACAAGTGGGAGCATTG	Check for insertion of Mega or Tn917 element
hexBL	GCAGCTGCATCGTGAAATAC	Amplify region upstream of <i>hexB</i>
hexBR	TAGAGGTAGCCTGGGTTCCA	Amplify region downstream of <i>hexB</i>
hexBboxL	GCTGACGTGGTTTGAAGAGA	Amplify region upstream of <i>hexB</i>
hexBboxR	CCACGTCAGTTTTATCAGTAATCTC	Amplify region downstream of <i>hexB</i>
ermBL	GTCATGGATATCTGGAAATAAGACTTAGAAGCAAACCTT	Amplify <i>ermB</i> gene from Tn917
ermBR	GATATCTCTCCATTCCCTTTAGTAACGTGT	Amplify <i>ermB</i> gene from Tn917
T7	TAATACGACTCACTATAGGG	Amplify MCS of pGEM-T Easy
SM_L	CCAGCTTTGAACGTTGGTTA	Check for DNA contamination of RNA samples
SM_R	AACACCTGCAGTATCAAGTGC	Check for DNA contamination of RNA samples
05060_PL	TCAAACCACGTCAGCTTCAC	Check for expression of SPN23F05060 locus
05060_PR	CTTGTCACCACCTTCTGCAA	Check for expression of SPN23F05060 locus
05060_PS	TAAAATCATTTTATACTCTTCGAAAATCTC	Check for expression of SPN23F05060 locus
16220_PL	ACCTGATAAAATTTAGTAAAATGC	Check for expression of SPN23F16220
16220_PR	TGTAAACGAGTAAAAGCGAAT	Check for expression of SPN23F16220
17630_PL	GAAGCCAAAACCTTCATCCA	Check for

Appendix I

		expression of SPN23F17630 locus
17630_PR	CAGGCTGCTCAAAACACG	Check for expression of SPN23F17630 locus
17630_PS	TTCACCTTTTGTGGATTGGTC	Check for expression of SPN23F17630 locus
21390_PL	TGTTCATATTCTAGGAAGATTTGTTGA	Check for expression of SPN23F21390 locus
21390_PR	GCAGGTTGCTCAAAACACTG	Check for expression of SPN23F21390 locus
21390_PS	TCCATAATATCTATAGTGGATTTACCC	Check for expression of SPN23F21390 locus
Tbox_PL	AATCTGCAATCGCAGCTAGG	Check for expression of <i>trp</i> operon leader sequence
Tbox_PR	CGTTACCAACGCCCTCAC	Check for expression of <i>trp</i> operon leader sequence
IntGL	GCCTGCCACTTGTAGGTTTT	Clone sequence upstream of <i>patAB</i>
InGR	GATAGGGCAGAAGAGCATCC	Clone sequence upstream of <i>patAB</i>

Appendix II: PMEN1 strains

Strain	Country	Year	Serotype	Inferred Serotype	ST	Inferred ST	MIC (Pen)	Source
ARG 740	Argentina	1995	23F	23F		81	1	Alexander Tomasz
3122	Canada	1994	19A	19A	81	81		Dylan Pillai
9295	Canada	1997	19F	19F	81	81	0.1	Dylan Pillai
9426	Canada	1997	19F	19F	81	81	4	Dylan Pillai
11126	Canada	1998	19F	19F	81	81	4	Dylan Pillai
34117	Canada	2007	23F	23F	81	81		Dylan Pillai
36148	Canada	2008	23F	23F	81	81		Dylan Pillai
HK P1	China	2000	23F	23F	81	81	2	Jae Hoon Song
HK P38	China	2000	23F	23F	81	81	2	Jae Hoon Song
TW M30	China	2000	19F	19F	81	81	2	Jae Hoon Song
HK P57	China	2001	23F	23F	81	81	2	Jae Hoon Song
HK P58	China	2001	19F	19F	81	81	1	Jae Hoon Song
HK P65	China	2001	23F	23F	81	81	2	Jae Hoon Song
S-030	China	2006	15B	15C	83	83		Lesley McGee
S-054	China	2006	15B	15C	83	83		Lesley McGee
S-055	China	2006	15B	15C	83	83		Lesley McGee
S-153	China	2006	23F	23F	81	81		Lesley McGee
COL 252	Colombia	1995	23F	23F		81	2	Alexander Tomasz
385	Croatia	2001	23F	23F	285	81		Lesley McGee
412	Croatia	2001	23F	23F	285	81		Lesley McGee
118-87	Denmark	1987	23F	23F		81	2	Lotte Lambertsen
484-93	Denmark	1993	23F	23F		DLV81	6	Lotte Lambertsen
88-93	Denmark	1993	23F	23F		81	3	Lotte Lambertsen
135-94	Denmark	1994	23F	23F		81	3	Lotte Lambertsen
848-95	Denmark	1995	23F	23F		81	2	Lotte Lambertsen
1392-96	Denmark	1996	23F	23F		81	4	Lotte Lambertsen
1437-96	Denmark	1996	23F	23F		81	8	Lotte Lambertsen
933-98	Denmark	1998	23F	23F		81	4	Lotte Lambertsen
BM4200	France	1978	23F	23F		1010		Sylvain Brisse
9300	France	2002	23F	23F	1598	1598	0.5	Mark van der Linden
9409	France	2002	23F	23F	81	81	2	Mark van der Linden
11865	France		23F	23F	81	81	1	Mark van der Linden
11867	France		23F	23F	81	81	2	Mark van der Linden
11868	France		23F	23F	81	81	1	Mark van der Linden
11875	France		23F	23F	81	81	1	Mark van der Linden
11876	France		23F	23F	81	81	1	Mark van der Linden
11881	France		23F	23F	81	81	2	Mark van der Linden
11883	France		23F	23F	81	81	1	Mark van der Linden
2859	Germany	1992	23F	23F	81	81	0.5	Mark van der Linden
2905	Germany	1992	23F	23F	81	81	2	Mark van der Linden
2934	Germany	1992	23F	23F	81	81	1	Mark van der Linden
3027	Germany	1992	23F	23F	81	81	0.5	Mark van der Linden
3296	Germany	1992	23F	23F	81	81	0.5	Mark van der Linden
3413	Germany	1992	23F	23F	81	81	0.5	Mark van der Linden
3696	Germany	1993	23F	23F	81	81	0.5	Mark van der Linden
3842	Germany	1993	23F	23F	81	81	0.5	Mark van der Linden

Appendix II

3848	Germany	1993	23F	23F	81	81	0.25	Mark van der Linden
3901	Germany	1993	23F	23F	81	81	0.5	Mark van der Linden
4114	Germany	1994	23F	23F	81	81	0.5	Mark van der Linden
4545	Germany	1995	23F	23F	81	81	0.5	Mark van der Linden
PMEN1_4605	Germany	1995	23F	23F	81	81	0.5	Mark van der Linden
5195	Germany	1996	23F	23F	81	81	0.25	Mark van der Linden
5204	Germany	1996	23F	23F	81	81	0.25	Mark van der Linden
24478	Germany	1997		23F	81	81	1	Mark van der Linden
13150	Germany	1998	23F	23F	81	81	2	Mark van der Linden
277	Germany	1998	23F	23F	81	81	0.5	Mark van der Linden
13804	Germany	1999	23F	23F	81	81	2	Mark van der Linden
6025	Germany	2000	23F	23F	1595	1595	1	Mark van der Linden
6039	Germany	2000	23F	23F	81	81	1	Mark van der Linden
902	Germany	2001	23F	23F	81	81	0.5	Mark van der Linden
4826	Germany	1995	19F	19F	1591	1591	1	Mark van der Linden
Kor 136	Korea	1998	23F	23F	81	81	2	Jae Hoon Song
Kor 138	Korea	1998	23F	23F	81	81	2	Jae Hoon Song
Kor 146	Korea	1998	6A	06A	81	81	2	Jae Hoon Song
Kor 148	Korea	1998	UT	14	81	81	1	Jae Hoon Song
Kor 28	Korea	1999	19F	19F	81	81	2	Jae Hoon Song
Kor 82	Korea	1999	23F	23F	81	81	2	Jae Hoon Song
Kor 906	Korea	1999	19F	19F	81	81	1	Jae Hoon Song
Kor 909	Korea	1999	23B	19F	81	81	1	Jae Hoon Song
Kor 910	Korea	1999	23F	23F	81	81	1	Jae Hoon Song
Kor 14	Korea	2000	6A	06A	81	81	4	Jae Hoon Song
Kor 16	Korea	2000	23F	23F	81	81	2	Jae Hoon Song
04-004	Korea	2004		19F	81	81	2	Jae Hoon Song
04-036	Korea	2004		06A	81	81	2	Jae Hoon Song
04-124	Korea	2004		23F	81	81	2	Jae Hoon Song
07-050	Korea	2007	6A	06A	81	81	2	Jae Hoon Song
07-117	Korea	2007	6A	06A	81	81	2	Jae Hoon Song
08-B-120	Korea	2007	23F	23F	81	81	2	Jae Hoon Song
Mal M12	Malaysia	1999	19F	19F	81	81	2	Jae Hoon Song
Mal M6	Malaysia	1999	19F	19F	81	81	2	Jae Hoon Song
Mal P4	Malaysia	1999	19F	19F	81	81	2	Jae Hoon Song
13 HIM	Mexico	1994	23F	23F		DLV81	4	Alexander Tomasz
35 HIM	Mexico	1994	23F	23F		81	8	Alexander Tomasz
46 HIM	Mexico	1994	23F	23F		81	4	Alexander Tomasz
9 HIM	Mexico	1994	23F	23F		81	4	Alexander Tomasz
109 HIM	Mexico	1995	23F	23F		81	4	Alexander Tomasz
11 CMN	Mexico	1995		23F		81	8	Alexander Tomasz
23 CMN	Mexico	1995	23F	23F		81	4	Alexander Tomasz
35 CMN	Mexico	1995	23F	23F		81	4	Alexander Tomasz
36 CMN	Mexico	1995	23F	23F		81	4	Alexander Tomasz
76 HIM	Mexico	1995	23F	23F		81	2	Alexander Tomasz
132 HIM	Mexico	1996	23F	23F		81	4	Alexander Tomasz
61 CMN	Mexico	1996	23F	23F		SLV81	4	Alexander Tomasz
8454	Portugal	2002	23F	23F	81	81	1	Mark van der Linden
23782	Russia	2003	23F	23F	81	81	2	Sergei Sidorenko
23784	Russia	2003	23F	23F	81	81	0.06	Sergei Sidorenko
23748	Russia	2004	23F	23F	81	81	2	Sergei Sidorenko

23771	Russia	2004	23F	23F	81	81	2	Sergei Sidorenko
23805	Russia	2004	23F	23F	81	81	2	Sergei Sidorenko
23841	Russia	2004		23F	81	81	2	Sergei Sidorenko
23809	Russia	2005	23F	23F	SLV8 1 ?	81	4	Sergei Sidorenko
23920	Russia	2005		23F	81	81	4	Sergei Sidorenko
SI M1	Singapore	2000	23F	23F	81	81	4	Jae Hoon Song
SI O1	Singapore	2000	19F	19F	81	81	2	Jae Hoon Song
SI O2	Singapore	2000	23F	23F	81	81	1	Jae Hoon Song
SI P12	Singapore	2000	19F	19F	81	81	1	Jae Hoon Song
SA151	South Africa	1989	23F	23F		SLV81	2	Anne von Gottberg
SA142	South Africa	1990	23F	23F		81	2	Anne von Gottberg
SA148	South Africa	1990	23F	23F		81	4	Anne von Gottberg
SA150	South Africa	1990	23F	23F		81	2	Anne von Gottberg
SA152	South Africa	1991	23F	23F		81	2	Anne von Gottberg
SA141	South Africa	1995	23F	23F		81	2	Anne von Gottberg
SA149	South Africa	1995	23F	23F		81	2	Anne von Gottberg
SA140	South Africa	1996	23F	23F		81	4	Anne von Gottberg
SA146	South Africa	1996	23F	23F		81	2	Anne von Gottberg
SA147	South Africa	1996	23F	23F		81	4	Anne von Gottberg
SA153	South Africa	1996	23F	23F		81	4	Anne von Gottberg
B743	South Africa	2001	23F	23F	81	81		Lesley McGee
SA1	South Africa	2001	23F	23F		81	0.75	Anne von Gottberg
SA2	South Africa	2001	23F	23F		SLV81	1	Anne von Gottberg
SA3	South Africa	2001	23F	23F		81	0.5	Anne von Gottberg
SA4	South Africa	2001	23F	23F		SLV81	1	Anne von Gottberg
SA5	South Africa	2001	23F	23F		DLV81	0.5	Anne von Gottberg
SA6	South Africa	2001	23F	23F		81	0.25	Anne von Gottberg
SA10	South Africa	2002	23F	23F		81	1	Anne von Gottberg
SA12	South Africa	2002	23F	23F		81	1	Anne von Gottberg
SA7	South Africa	2002	23F	23F		SLV81	1	Anne von Gottberg
SA8	South Africa	2002	23F	23F		81	0.25	Anne von Gottberg
SA9	South Africa	2002	23F	23F		81	0.25	Anne von Gottberg
SA17	South Africa	2003	23F	23F		SLV81	1	Anne von Gottberg

Appendix II

SA20	South Africa	2003	23F	23F		81	1	Anne von Gottberg
SA21	South Africa	2003	23F	23F		81	1	Anne von Gottberg
SA23	South Africa	2003	23F	23F		81	0.5	Anne von Gottberg
SA25	South Africa	2003	23F	23F		81	1	Anne von Gottberg
SA27	South Africa	2003	23F	23F		SLV81	1	Anne von Gottberg
SA29	South Africa	2004	23F	23F		81	1	Anne von Gottberg
SA34	South Africa	2004	23F	23F		81	1	Anne von Gottberg
SA36	South Africa	2004	23F	23F		81	1	Anne von Gottberg
SA57	South Africa	2005	23F	23F		81	1	Anne von Gottberg
SA61	South Africa	2005	23F	23F		2395	1	Anne von Gottberg
SA101	South Africa	2006	23F	23F		81	1	Anne von Gottberg
SA106	South Africa	2006	23F	23F		81	1	Anne von Gottberg
SA78	South Africa	2006	23F	23F		SLV81	1	Anne von Gottberg
ATCC 700669	Spain	1984	23F	23F	81	81		Tim Mitchell
8140	Spain	2001	19A	19A	81	81	2	Mark van der Linden
8143	Spain	2001	19A	19A	81	81	2	Mark van der Linden
B532	Spain	2001	23F	23F	81	81		Lesley McGee
9029	Spain	2002	19F	19F	81	81	4	Mark van der Linden
257	Spain	1989	23F	23F		81		Alexander Tomasz
622	Spain	1989	23F	23F		81		Alexander Tomasz
11919	Spain		23F	23F	81	81	1	Mark van der Linden
11923	Spain		23F	23F	81	81	1	Mark van der Linden
11924	Spain		23F	23F	81	81	1	Mark van der Linden
11925	Spain		23F	23F	81	81	0.5	Mark van der Linden
11928	Spain		23F	23F	81	81	1	Mark van der Linden
11930	Spain		23F	23F	81	81	1	Mark van der Linden
11932	Spain		23F	23F	81	81	1	Mark van der Linden
11933	Spain		23F	23F	81	81	1	Mark van der Linden
11934	Spain		23F	23F	81	81	1	Mark van der Linden
11935	Spain		23F	23F	81	81	1	Mark van der Linden
11936	Spain		23F	23F	81	81	1	Mark van der Linden
11937	Spain		23F	23F	81	81	1	Mark van der Linden
Th 13	Thailand	2000	19F	19F	81	81	1	Jae Hoon Song
Th 32	Thailand	2000	23F	23F	81	81	4	Jae Hoon Song
Th 5	Thailand	2000	19F	19F	81	81	2	Jae Hoon Song
Th 104	Thailand	2001	23F	23F	81	81	2	Jae Hoon Song
BS1	Turkey	2005	23F	23F	81	81		Lesley McGee
BS26	Turkey	2005	6A	06A	81	81		Lesley McGee
DG104	Turkey	2005	23F	23F	81	SLV81		Lesley McGee
DG116	Turkey	2005	23F	23F	81	81		Lesley McGee
DG15	Turkey	2005	19F	19F	81	81		Lesley McGee

DG18	Turkey	2005	6A	06A	81	81		Lesley McGee
DG29	Turkey	2005	6A	06A	81	81		Lesley McGee
DG80	Turkey	2005	6A	06A	81	81		Lesley McGee
DG99	Turkey	2005	23F	23F	81	81		Lesley McGee
GH10	Turkey	2005	23F	23F	81	81		Lesley McGee
MA28	Turkey	2005	23F	23F	81	81		Lesley McGee
LIV 5	UK	1990	23	23F		81	2	Bruno Pichon
PLY 7	UK	1990	23	23F		81	0.5	Bruno Pichon
STO 19	UK	1990	23	23F		81	2	Bruno Pichon
STO 20	UK	1990	23	23F		81	2	Bruno Pichon
2PN05348	UK	2002	23F	23F	81	81		Bruno Pichon
3PN00020	UK	2002	23F	23F	2532	2532		Bruno Pichon
3PN00133	UK	2003	23F	23F	81	81		Bruno Pichon
3PN00734	UK	2003	23F	23F	81	81		Bruno Pichon
3PN01287	UK	2003	23F	23F	81	81		Bruno Pichon
H034800032	UK	2003	23F	23F	81	81	1	Bruno Pichon
H034960030	UK	2003	23F	23F	1623	81	1	Bruno Pichon
H035220198	UK	2003	23F	23F	81	81	1	Bruno Pichon
04-2922	UK	2004	23F	23F	81	81		Tim Mitchell
04-2937	UK	2004	23F	23F	81	SLV81		Tim Mitchell
H050340158	UK	2004	23F	23F	2508	2508		Bruno Pichon
H050300113	UK	2005	23F	23F	81	81	2	Bruno Pichon
H071440111	UK	2007	23F	23F	3456	3456	0.5	Bruno Pichon
H0752805310 1	UK	2007	19F	19F	81	81	1	Bruno Pichon
H0801601790 1	UK	2007	3	3	81	81	1	Bruno Pichon
UR 112	Uruguay	1993	23F	23F		81	2	Alexander Tomasz
UR 208	Uruguay	1994	23F	23F		81	2	Alexander Tomasz
UR 428	Uruguay	1996	23F	23F		81	2	Alexander Tomasz
SVMC 10	USA	1995	23F	23F		81	4	Alexander Tomasz
SVMC 6	USA	1995	23F	23F		81	2	Alexander Tomasz
2231	USA	1998	23F	23F	81	81	4	Lesley McGee
2311	USA	1998	23F	19F	81	81	2	Lesley McGee
2321	USA	1998	23F	23F	81	81	0.5	Lesley McGee
228	USA	1999	23F	23F	81	81		Lesley McGee
92	USA	2001	19F	19F	81	81	2	Lesley McGee
111	USA	2001	23F	23F	81	81	2	Lesley McGee
2167	USA	2002	23F	23F	81	81	2	Lesley McGee
1590	USA	2005	23F	23F	81	81	2	Lesley McGee
1731	USA	2005	19A	19A	81	2346	4	Lesley McGee
1788	USA	2005	19A	19A	2346	2346	4	Lesley McGee
1789	USA	2005	19A	19A	2346	2346	4	Lesley McGee
1842	USA	2005	19A	19A	2346	2346	4	Lesley McGee
2097	USA	2005	19A	19A	2346	2346	4	Lesley McGee
2098	USA	2005	19A	19A	2346	2346	3	Lesley McGee
2615	USA	2006	19A	19F	81	81	4	Lesley McGee
2682	USA	2006	19A	19A	81	SLV81	4	Lesley McGee
2699	USA	2006	19A	19A	81	2346	4	Lesley McGee
3267	USA	2007	19A	19A	81	2346	4	Lesley McGee
3350	USA	2007	19A	19A	81	2346	4	Lesley McGee
3355	USA	2007	19A	19A	81	2346	4	Lesley McGee

Appendix II

Clev 2	USA	1989	23F	23F		81		Alexander Tomasz
VII-17	USA	1998	23F	23F		81	2	Alexander Tomasz
VII-22	USA	1998	23F	23F		81	2	Alexander Tomasz
VII-26	USA	1998	23F	23F		81	2	Alexander Tomasz
VII-28	USA	1998	23F	23F		81	3	Alexander Tomasz
VIII-1	USA	1998	23F	23F		81	3	Alexander Tomasz
VIII-2	USA	1998	23F	23F		81	3	Alexander Tomasz
VIII-6	USA	1998	23F	23F		81	2	Alexander Tomasz
X-8	USA	1998	23F	23F		81	2	Alexander Tomasz
SB12	Vietnam	1997	23F	23F	81	81	0.75	Christopher Parry
SB33	Vietnam	1997	23F	23F	81	81	1	Christopher Parry
SB35	Vietnam	1997	23F	23F	81	81	0.25	Christopher Parry
SB36	Vietnam	1997	23F	23F	81	81	1	Christopher Parry
SB6	Vietnam	1997	23F	23F	81	81	2	Christopher Parry
SB2	Vietnam	1998	23F	23F	81	81	0.125	Christopher Parry
SB3	Vietnam	1999	23F	23F	81	SLV81	1	Christopher Parry
SB31	Vietnam	1999	23F	23F	81	SLV81	1.5	Christopher Parry
SB50	Vietnam	1999	23F	23F	81	81	1.5	Christopher Parry
SB18	Vietnam	2000	23F	23F	81	SLV81	1.5	Christopher Parry
VN B15	Vietnam	2000	NT	23F	81	81	2	Christopher Parry

Appendix III: EMBL accession codes

Sequence	EMBL Accession	Host strain	Description
<i>S. pneumoniae</i> ATCC 700669	FM211187	-	Complete genome of <i>S. pneumoniae</i> ATCC 700669
<i>S. pneumoniae</i> OXC141	FQ312027	-	Complete genome of <i>S. pneumoniae</i> OXC141
ICES _{Spn} 11930	FR671403	11930	Tn5252/Tn916-type composite ICE
ICES _{Spn} 11876	FR671404	11876	Tn5252/Tn916-type composite ICE
ICES _{Spn} 8140	FR671412	8140	ICES _{t1} -type ICE
Tn916-type ICE	FR671413	Mal M6	Tn916-type ICE
Tn916-type ICE	FR671414	H034800032	Tn916-type ICE
Tn916-type ICE	FR671415	23771	Tn916-type ICE
Tn916-type ICE	FR671416	11930	Tn916-type ICE
Tn916-type ICE	FR671417	11928	Tn916-type ICE
Tn916-type ICE	FR671418	9409	Tn916-type ICE
Prophage φV22	FR671405	V22	Group 2b prophage
Prophage φ040922	FR671406	04-0922	Group 2a prophage
Prophage φ34117	FR671407	34117	Group 2b prophage
Prophage φ23782	FR671408	23782	Group 1 prophage
Prophage φ11865	FR671409	11865	Group 1 prophage
Prophage φ8140	FR671410	8140	Group 2b prophage
Prophage φ2167	FR671411	2167	Group 2b prophage

Appendix IV: Serotype 3 strains

Strain	Country	Year	Serotype	Inferred serotype	CC	Inferred ST	Source
07-2838	Bolivia	2007	3	3	180	180	Tim Mitchell
BHN604	Czech Rep	2003	3	3	180	180	Birgitta Henriques Nomark
BHN605	Czech Rep	2000	3	3	180	180	Birgitta Henriques Nomark
BHN610	Czech Rep	2000	3	3	180	SLV180	Birgitta Henriques Nomark
BHN611	Czech Rep	2002	3	3	180	505	Birgitta Henriques Nomark
BHN596	Czech Rep	2003	3	3	180	180	Birgitta Henriques Nomark
BHN602	Czech Rep	2003	3	3	180	180	Birgitta Henriques Nomark
BHN594	Czech Rep	2003	3	3	180	180	Birgitta Henriques Nomark
BHN593	Czech Rep	2001	3	3	180	180	Birgitta Henriques Nomark
BHN597	Czech Rep	2000	3	3	180	180	Birgitta Henriques Nomark
BHN588	Czech Rep	1998	3	3	180	180	Birgitta Henriques Nomark
BHN590	Czech Rep	2002	3	3	180	180	Birgitta Henriques Nomark
BHN595	Czech Rep	2001	3	3	180	180	Birgitta Henriques Nomark
BHN598	Czech Rep	2000	3	3	180	180	Birgitta Henriques Nomark
BHN612	Czech Rep	1999	3	3	180	180	Birgitta Henriques Nomark
BHN586	Czech Rep	1995	3	3	180	505	Birgitta Henriques Nomark
BHN607	Czech Rep	1999	3	3	180	180	Birgitta Henriques Nomark
BHN589	Czech Rep	1996	3	3	180	180	Birgitta Henriques Nomark
BHN599	Czech Rep	2001	3	3	180	180	Birgitta Henriques Nomark
BHN606	Czech Rep	2001	3	3	180	180	Birgitta Henriques Nomark
BHN591	Czech Rep	2003	3	3	180	180	Birgitta Henriques Nomark
BHN587	Czech Rep	2001	3	3	180	180	Birgitta Henriques Nomark
BHN585	Czech Rep	1997	3	3	180	180	Birgitta Henriques Nomark
BHN603	Czech Rep	2002	3	3	180	SLV180	Birgitta Henriques Nomark
BHN601	Czech Rep	1995	3	3	180	180	Birgitta Henriques Nomark
BHN600	Czech Rep	2003	3	3	180	180	Birgitta Henriques Nomark

BHN608	Czech Rep	2003	3	3	180	180	Birgitta Henriques Nomark
BHN592	Czech Rep	2000	3	3	180	180	Birgitta Henriques Nomark
BHN609	Czech Rep	2004	3	3	180	180	Birgitta Henriques Nomark
BHN582	England		3	3	180	180	Birgitta Henriques Nomark
OXC141	England		3	3	180	180	Tim Mitchell
03-4183	Netherlands	2003	3	3	180	180	Tim Mitchell
03-4156	Netherlands	2003	3	3	180	180	Tim Mitchell
02-1198	Scotland	2002	3	3	180	180	Tim Mitchell
99-4038	Scotland	1999	3	3	180	180	Tim Mitchell
99-4039	Scotland	1999	3	3	180	180	Tim Mitchell
BHN584	Spain		3	3	180	180	Birgitta Henriques Nomark
BHN035	Spain		3	3	180	180	Birgitta Henriques Nomark
BHN630	Sweden	2000	3	3	180	180	Birgitta Henriques Nomark
BHN626	Sweden	1999	3	3	180	180	Birgitta Henriques Nomark
BHN654	Sweden	2003	3	3	180	180	Birgitta Henriques Nomark
BHN646	Sweden	2001	3	3	180	180	Birgitta Henriques Nomark
BHN383	Sweden	2001	3	3	180	180	Birgitta Henriques Nomark
BHN576	Sweden	1994	3	3	180	180	Birgitta Henriques Nomark
BHN625	Sweden	1999	3	3	180	180	Birgitta Henriques Nomark
BHN621	Sweden	1998	3	3	180	180	Birgitta Henriques Nomark
BHN622	Sweden	1999	3	3	180	180	Birgitta Henriques Nomark
BHN652	Sweden	2002	3	3	180	180	Birgitta Henriques Nomark
BHN624	Sweden	1999	3	3	180	180	Birgitta Henriques Nomark
BHN583	Sweden	1995	3	3	180	180	Birgitta Henriques Nomark
BHN577	Sweden	1995	3	3	180	180	Birgitta Henriques Nomark
BHN578	Sweden		3	3	180	180	Birgitta Henriques Nomark
BHN037	Sweden		3	3	180	1826	Birgitta Henriques Nomark
BHN579	Sweden		3	3	180	180	Birgitta Henriques Nomark
BHN638	Sweden	1998	3	3	180	180	Birgitta Henriques Nomark
BHN628	Sweden	2000	3	3	180	180	Birgitta Henriques Nomark
BHN167	Sweden		3	3	180	180	Birgitta Henriques

Appendix IV

BHN167	Sweden		3	3	180	180	Birgitta Henriques Nomark
BHN623	Sweden	1999	3	3	180	180	Birgitta Henriques Nomark
BHN632	Sweden	1998	3	3	180	180	Birgitta Henriques Nomark
BHN633	Sweden	2000	3	3	180	SLV180	Birgitta Henriques Nomark
BHN629	Sweden	2000	3	3	180	180	Birgitta Henriques Nomark
BHN341	Sweden	2001	3	3	180	180	Birgitta Henriques Nomark
BHN580	Sweden		3	3	180	180	Birgitta Henriques Nomark
BHN616	Sweden		3	3	180	180	Birgitta Henriques Nomark
BHN643	Sweden	1998	3	3	180	180	Birgitta Henriques Nomark
BHN657	Sweden	2006	3	3	180	180	Birgitta Henriques Nomark
BHN575	Sweden	1994	3	3	180	180	Birgitta Henriques Nomark
BHN369	Sweden	2000	3	3	180	180	Birgitta Henriques Nomark
BHN645	Sweden	2001	3	3	180	180	Birgitta Henriques Nomark
BHN642	Sweden	1998	3	3	180	180	Birgitta Henriques Nomark
BHN636	Sweden	2001	3	3	180	180	Birgitta Henriques Nomark
BHN651	Sweden	1997	3	3	180	180	Birgitta Henriques Nomark
BHN647	Sweden	2007	3	3	180	180	Birgitta Henriques Nomark
BHN644	Sweden	2000	3	3	180	180	Birgitta Henriques Nomark
BHN637	Sweden	2001	3	3	180	180	Birgitta Henriques Nomark
BHN640	Sweden	1998	3	3	180	180	Birgitta Henriques Nomark
BHN631	Sweden	2000	3	3	180	180	Birgitta Henriques Nomark
BHN650	Sweden	1997	3	3	180	180	Birgitta Henriques Nomark
BHN572	USA	1994	3	3	180	180	Birgitta Henriques Nomark
BHN413	USA	1993	3	3	180	180	Birgitta Henriques Nomark
BHN570	USA	1994	3	3	180	180	Birgitta Henriques Nomark
BHN573	USA	1994	3	3	180	180	Birgitta Henriques Nomark
BHN574	USA	1995	3	3	180	180	Birgitta Henriques Nomark
BHN571	USA	1995	3	3	180	180	Birgitta Henriques