

Supplemental Data Table S1. Isolation year, sample type, *emm* type/cluster, ST, superantigen profile, and GenBank accession number of the 87 *Streptococcus pyogenes* strains

Strain	Isolation year	Sample	<i>emm</i> genotype	<i>emm</i> cluster	ST	Superantigen profile	Accession number
GCH79	1997	Throat swab	1.76	A-C3	28	SmeZ-SpeB	WSTD00000000
GCH80	1997	Throat swab	1.76	A-C3	28	SmeZ-SpeB-SpeC	WSTE00000000
GCH81	1997	Throat swab	3.10	A-C5	1261	SmeZ-SpeB-ssa	WTFP00000000
GCH82	1997	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	WTFQ00000000
GCH83	1997	Throat swab	4.00	E1	38	SmeZ-SpeB-SpeC-ssa	WWFH00000000
GCH84	1997	Throat swab	12.00	A-C4	36	SmeZ-SpeB-SpeC	WWFI00000000
GCH85	1997	Throat swab	12.00	A-C4	36	SmeZ-SpeB-SpeC	WWFJ00000000
GCH86	1997	Throat swab	12.00	A-C4	36	SmeZ-SpeB-SpeC	WWFK00000000
GCH87	2006	Throat swab	1.00	A-C3	28	SmeZ-SpeB	WWFL00000000
GCH88	2006	Throat swab	1.00	A-C3	28	SmeZ-SpeB	WWFM00000000
GCH89	2006	Throat swab	3.10	A-C5	15	SmeZ-SpeB-ssa	WWFN00000000
GCH90	2006	Throat swab	3.10	A-C5	15	SmeZ-SpeB	WWFO00000000
GCH91	2006	Throat swab	3.10	A-C5	15	SmeZ-SpeB-ssa	JAAAMW00000000
GCH92	2006	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JAAAMX00000000
GCH93	2006	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JAAAMY00000000
GCH94	2006	Throat swab	1.00	A-C3	28	SmeZ-SpeB	JAAAMZ00000000
GCH95	2006	Throat swab	11.00	E6	403	SmeZ-SpeB-SpeC	JAAANA00000000
GCH96	2006	Throat swab	28.00	E4	52	SmeZ-SpeB-SpeC	JAAANB00000000
GCH97	2017	Throat swab	1.30	A-C3	28	SmeZ-SpeB	JAAANC00000000
GCH98	2017	Throat swab	1.18	A-C3	28	SmeZ-SpeB	JAAAND00000000
GCH100	2017	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JAAANE00000000
GCH101	2017	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JAAANF00000000
GCH102	2017	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JAAANG00000000
GCH103	2017	Throat swab	12.00	A-C4	36	SmeZ-SpeB	JAAANH00000000
GCH104	2017	Throat swab	12.00	A-C4	36	SmeZ-SpeB	JAAANI00000000
GCH105	2017	Throat swab	12.00	A-C4	36	SmeZ-SpeB	JAAANJ00000000
GCH106	2017	Throat swab	28.00	E4	52	SmeZ-SpeB-SpeC	JAAANK00000000
GCH107	2017	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JAAANL00000000
GCH108	2017	Throat swab	12.00	A-C4	36	SmeZ-SpeB	JAAANM00000000
GCH109	1997	Blood	94.00	E6	399	SmeZ-SpeB	JAAANN00000000
GCH110	1997	Blood	49.00	E3	1254	SpeB	JAAANO00000000
GCH111	2002	Blood	3.10	A-C5	15	SmeZ-SpeB-ssa	JAAANP00000000
GCH112	2004	Blood	3.10	A-C5	15	SmeZ-SpeB-ssa	JAAANQ00000000
GCH113	2010	Joint fluid	12.49	A-C4	36	SmeZ-SpeB	JAAANR00000000
GCH114	2011	Blood	1.00	A-C3	28	SmeZ-SpeB	JAAANS00000000
GCH115	2011	Joint fluid	3.10	A-C5	15	SmeZ-SpeB-ssa	JAAANT00000000
GCH116	2014	Blood	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JAAANU00000000
GCH117	2016	Blood	1.30	A-C3	28	SmeZ-SpeB	JAAANV00000000
GCH118	2017	Joint fluid	12.00	A-C4	36	SmeZ-SpeB	JAAANW00000000
GCH128	2011	Blood	12.00	A-C4	36	SmeZ-SpeB	JABUOL00000000

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Strain	Isolation year	Sample	<i>emm</i> genotype	<i>emm</i> cluster	ST	Superantigen profile	Accession number
GCH129	2012	Blood	12.00	A-C4	36	SmeZ-SpeB	JABLSL000000000
GCH130	2012	Blood	1.00	A-C3	28	SmeZ-SpeB	JABUOM000000000
GCH131	2012	Blood	1.00	A-C3	28	SmeZ-SpeB	JABUON000000000
GCH132	2013	Blood	75.00	E6	49	SmeZ-SpeB-SpeC	JABUO0000000000
GCH133	2015	Blood	1.00	A-C3	785	SmeZ-SpeB	JABUOP000000000
GCH134	2015	Blood	1.00	A-C3	28	SmeZ-SpeB	JABUOQ000000000
GCH135	2016	Blood	28.00	E4	52	SmeZ-SpeB-SpeC	JABUJB000000000
GCH136	2016	Blood	1.00	A-C3	28	SmeZ-SpeB	JABUJC000000000
GCH137	2017	Blood	3.10	A-C5	15	SmeZ-SpeB-ssa	JABUJD000000000
GCH138	2017	Blood	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JABUJE000000000
GCH139	2017	Blood	28.00	E4	52	SmeZ-SpeB-SpeC	JABUJF000000000
GCH140	2018	Blood	1.00	A-C3	28	SmeZ-SpeB	JABUJG000000000
GCH141	2018	Blood	28.00	E4	52	SmeZ-SpeB-SpeC	JABUJH000000000
GCH142	2006	Throat swab	12.00	A-C4	36	SmeZ-SpeB	JABUJI000000000
GCH143	2006	Throat swab	78.30	E1	253	SmeZ-SpeB-SpeC	JABUJJ000000000
GCH144	2006	Throat swab	6.90	Single protein M cluster clade Y	37	SmeZ-SpeB	JABUJK000000000
GCH145	2006	Throat swab	87.10	E3	62	SmeZ-SpeB	JABUJL000000000
GCH146	2006	Throat swab	114.60	E4	1,108	SmeZ-SpeB	JABUJM000000000
GCH147	2006	Throat swab	22.00	E4	46	SmeZ-SpeB-SpeC-ssa	JABUJN000000000
GCH148	2006	Throat swab	5.14	Single protein M cluster clade Y	99	SmeZ-SpeB-SpeC-ssa	JABUJO000000000
GCH149	2006	Throat swab	11.00	E6	403	SmeZ-SpeB	JABUJP000000000
GCH150	2006	Throat swab	22.00	E4	46	SmeZ-SpeB-SpeC-ssa	JABUJQ000000000
GCH151	2005	Throat swab	78.30	E1	253	SmeZ-SpeB-SpeC	JABUJR000000000
GCH152	2005	Throat swab	22.00	E4	46	SmeZ-SpeB-SpeC-ssa	JABUJS000000000
GCH153	2005	Throat swab	78.30	E1	253	SmeZ-SpeB-SpeC	JABUJT000000000
GCH154	2005	Throat swab	78.30	E1	253	SmeZ-SpeB-SpeC	JABUJU000000000
GCH155	2005	Throat swab	94.00	E6	89	SmeZ-SpeB-SpeC	JABUJV000000000
GCH156	2005	Throat swab	94.00	E6	89	SmeZ-SpeB-SpeC	JABUAZ000000000
GCH157	2005	Throat swab	5.14	Single protein M cluster clade Y	99	SmeZ-SpeB-SpeC-ssa	JABUBA000000000
GCH158	2005	Throat swab	5.14	Single protein M cluster clade Y	99	SmeZ-SpeB-SpeC-ssa	JABUBB000000000
GCH159	2005	Throat swab	78.30	E1	253	SmeZ-SpeB-SpeC	JABUAT000000000
GCH160	2006	Throat swab	22.00	E4	46	SmeZ-SpeB-SpeC-ssa	JABUAP000000000
GCH161	2006	Throat swab	22.00	E4	46	SmeZ-SpeB-SpeC-ssa	JABUAQ000000000
GCH163	2006	Throat swab	44.00	E3	25	SmeZ-SpeB-ssa	JABUBC000000000
GCH164	1997	Throat swab	12.00	A-C4	36	SmeZ-SpeB-SpeC	JABUAU000000000
GCH165	1997	Throat swab	12.00	A-C4	36	SmeZ-SpeB-SpeC	JABUAV000000000
GCH166	1997	Throat swab	12.19	A-C4	36	SmeZ-SpeB-SpeC	JABUAW000000000
GCH167	1997	Throat swab	12.00	A-C4	36	SmeZ-SpeB-SpeC	JABUAX000000000

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Supplemental Data Table S1. Continued

Strain	Isolation year	Sample	<i>emm</i> genotype	<i>emm</i> cluster	ST	Superantigen profile	Accession number
GCH168	1997	Throat swab	4.00	E1	38	SmeZ-SpeB-SpeC-ssa	JABUAY000000000
GCH169	1997	Throat swab	1.30	A-C3	28	SmeZ-SpeB	JABUAR000000000
GCH170	2006	Throat swab	12.00	A-C4	36	SmeZ-SpeB	JABUAS000000000
GCH171	2006	Throat swab	12.00	A-C4	36	SmeZ-SpeB	JABUAJ000000000
GCH172	2017	Throat swab	28.00	E4	458	SmeZ-SpeB-SpeC	JABUAK000000000
GCH173	2017	Throat swab	28.00	E4	52	SmeZ-SpeB-SpeC	JABUAL000000000
GCH174	2017	Throat swab	1.00	A-C3	28	SmeZ-SpeB	JABUAM000000000
GCH175	2017	Throat swab	28.00	E4	52	SmeZ-SpeB-SpeC	JABUAN000000000
GCH178	2017	Throat swab	4.00	E1	39	SmeZ-SpeB-SpeC-ssa	JABUAO000000000

Bold type indicates invasiveness.

Abbreviation: ST, sequence type.