

Serovar (# of isolates)	ID by PCR-MS (serovar level)	# other serovars at same confidence level	# Primer pairs matching in database (out of 6)
Top-40			
Typhimurium (9)	Typhimurium	1	6
Enteritidis	Mbandaka	3	5
Enteritidis (2)	Dublin	0	6
Enteritidis (5)	Enteritidis	3	6
Newport (8)	Newport	0	6
Heidelberg (3)	Heidelberg	2	6
Javiana (7)	Javiana	1	5
Typhimurium var 5 (7)	Typhimurium	1	6
Montevideo (6)	Montevideo	3	6
Muenchen (2)	Muenchen	1	5
Oranienburg	Chester	1	4
Oranienburg (2)	Reading	1	4
Oranienburg (4)	Oranienburg	10	6
Saintpaul	Heidelberg	2	6
Saintpaul (5)	Saintpaul	2	6
Infantis	Dublin	2	4
Infantis	Heidelberg	4	4
Infantis	Typhesius	1	4
Infantis	Bareilly	0	6
Infantis (4)	Infantis	0	6
Thompson	Gaminara	10	6
Thompson (2)	Thompson	1	6
Thompson (6)	Choleraesuis	3	5
Braenderup (3)	Braenderup	0	6
Agona (6)	Agona	1	6
Hadar (4)	Hadar	1	6
Paratyphi B (6)	Paratyphi B	1	6
Poona (4)	Poona	0	6
Stanley (6)	Stanley	1	6
Anatum (7)	Anatum	1	6
Bareilly (6)	Bareilly	0	6
Mbandaka	Muenchen	1	4
Mbandaka	Reading	1	6
Mbandaka (3)	Senftenberg	0	4
Mbandaka (3)	Newport	0	4
Paratyphi B	Thompson	1	5
Paratyphi B (6)	Paratyphi B	0	6
Hartford	Muenchen	1	5
Panama (3)	Panama	2	6
Derby (5)	Derby	0	6
Derby	Anatum	1	6
Litchfield	Sloterdijk	1	4
Schwarzengrund	Paratyphi B	1	6
Schwarzengrund (4)	Schwarzengrund	10	6

Senftenberg (7)	Senftenberg	10	6
Brandenburg (2)	Brandenburg	10	6
Sandiego	Gaminara	10	6
Sandiego	Panama	2	6
Sandiego (4)	Reading	1	6
Sandiego	Muenchen	1	4
Give (3)	Urbana	0	6
Give (3)	Give	10	6
Give	Miami	0	5
Rubislaw	Rubislaw	0	6
Rubislaw	Panama	1	4

Non-top 40

Abaeletuba (2)	Gaminara	10	6
Aberdeen (7)	Paratyphi B	0	6
Adelaide	Adelaide	0	6
Aequatoria	Rissen	0	3
Alachua	Senftenberg	0	5
Albany (2)	Albany	0	6
Amager	Anatum	1	6
Amersfoort	Give	10	6
Amsterdam	Mbandaka	1	4
Amsterdam (2)	Pomona	0	4
Astridplein	Anatum	1	6
Athinai	Senftenberg	0	4
Augustenberg	Dublin	2	4
Augustenborg	Newport	1	4
Bahrenfeld	Urbana	0	5
Bangui	Adelaide	0	2
Bardo (2)	Newport	0	6
Benfica	Paratyphi B	0	6
Blockley	Choleraesuis	3	5
Blockley (3)	Blockley	1	6
Bovismorbificans	Derby	3	4
Bovismorbificans (3)	Anatum	1	5
Brancaster	Senftenberg	0	5
Bredeney	Rubislaw	0	5
Brunei (6)	Hadar	1	5
Butantan	Sendai	2	4
Butantan	Gaminara	10	5
Cannstatt	Give	10	5
Caracas (3)	Urbana	0	5
Carrau	Urbana	0	5
Cerro	Albany	4	4
Cerro	Typhisuis	1	4
Cerro var. O 14+	Sendai	2	4
Cerro var. O 14+	Typhisuis	1	4
Chailey	Hadar	1	6

Champaign	Sloterdijk	1	5
Chester (2)	Chester	1	6
Chicago	Cerro	0	5
Coleypark	Anatum	1	6
Coleypark	Sloterdijk	1	6
Corvallis (4)	Newport	0	4
Cubana (6)	Senftenberg	0	4
Denver	Enteritidis	1	3
Duesseldorf	Albany	0	6
Eastbourne (2)	Rubislaw	0	1
Emek (2)	Emek	0	6
Freetown (2)	Miami	0	5
Fresno	Paratyphi	1	6
Fulica	Subspecies II	0	5
Gaminara (6)	Gaminara	10	6
Giza	Hadar	1	5
Goulfy	Muenchen	0	5
Gozo	4,5,12, i-	1	6
Group V antisera HME	Anatum	1	4
Hato	Agona	1	6
Havana	Pomona	2	3
Havana (2)	Wien	0	4
Hermannswerder	Pomona	0	4
Hidalgo	Pomona	0	6
Hindmarsh	Anatum	1	5
Hvittingfoss	Derby	1	4
Hvittingfoss	Muenchen	1	4
Hvittingfoss (3)	Paratyphi B	0	6
I 47:z4,z23	Newport	0	4
I 47:zy:z23	Newport	0	4
I 9,12: l,z28	Javiana	1	6
Idikan	Worthington	3	5
Idikan (2)	Derby	0	5
Isangi	Dublin	0	4
Kedougou	Derby	0	4
Kentucky	Senftenberg	0	5
Kentucky	4,5,12,i-	1	6
Kentucky (2)	Kentucky	0	6
Kentucky (3)	Anatum	1	5
Kiambu	Sendai	2	4
Kirkee	Pomona	0	4
Kottbus (2)	Mbandaka	1	5
Koumra	Urbana	0	5
Kumasi	Miami	0	4
Lansing (2)	Anatum	1	6
LaRochelle	Newport	0	6
Lexington	Newport	0	3
Lexington (6)	Sendai	2	4

Lexington var O15+	Newport	0	3
Lille	Albany	0	3
Liverpool	Adelaide	2	3
Liverpool	Reading	1	3
Livingstone	Senftenberg	0	5
Livingstone var O14+	Heidelberg	2	6
Llandoff (3)	Enteritidis	0	5
London	London	1	6
London	Paratyphi B	1	6
London (2)	Stanley	1	6
Madelia	Miami	1	5
Madelia	Urbana	0	5
Magwa	Worthington	2	6
Matopeni	Albany	4	4
Matopeni	Muenchen	4	4
Meleagridis (3)	Gallinarum	5	5
Mgulani	Muenchen	1	4
Mgulani (2)	Dublin	2	4
Michigan	Mbandaka	5	5
Michigan	Paratyphi B	0	5
Minnesota	Minnesota	10	6
Minnesota	Thompson	1	6
Muenster	Gaminara	10	6
Muenster (2)	Give	10	6
Nessziona	Gallinarum	3	4
Nordrhein	Newport	0	4
Ohio (4)	Lac-	2	5
Onderstepoort	Urbana	0	5
Orientalis	Muenchen	0	4
Orion	Sendai	2	4
Orion	Bareilly	0	6
Orion var 15+ 34+	Infantis	0	6
Oslo	Enteritidis	1	5
Oslo	Newport	0	6
Oslo (2)	Paratyphi A	1	5
Othmarschen	Montevideo	2	6
Oukam	Enteritidis	0	5
Pomona (2)	Pomona	0	6
Potsdam	Paratyphi	2	6
Potsdam (4)	Muenchen	3	5
Richmond (2)	Bareilly	0	6
Rideau	Wien	0	6
Rissen (7)	Rissen	0	6
Rutgers (Give)	Urbana	0	6
Santiago	Typhisuis	1	5
Singapore	Muenchen	1	6
Sundsvall	Wien	15	4
Sundsvall	Paratyphi B	0	6

Teko	Wien	4	4
Telaviv	Indiana	0	4
Telhashomer	Sloterdijk	1	4
Tennessee (3)	Lac-	1	6
Tuscon	Urbana	0	5
Uganda var O15+ (2)	Stanley	1	4
Urbana	Reading	1	5
Urbana	Rubislaw	0	5
Virchow (3)	Virchow	1	6
Vitkin	Sendai	2	4
Wandsworth	Choleraesuis	1	3
Wandsworth (2)	Typhisius	3	4
Warragul	Sendai	4	3
Weltevreden (7)	Mbandaka	1	6
Wentworth	Paratyphi B	0	6
Yeene	Sloterdijk	1	5

Non-subspecies I

II (4)	Salamae	0	6
IIIa (2)	Arizonae	0	6
IIIb (7)	Diarizonae	0	5
IV (8)	Houtenae	0	6
VI	Indica	0	4

^aSerovars in bold were concordant.

Table S1. List of all *S. enterica* serovars studied and related PCR-MS identifications^a.