

Table S1 Antibody activity of sera from culture-confirmed typhoid patients determined by various ELISA and TUBEX tests.

Specimen no.	Days of fever at sampling	ELISA IgM			ELISA IgG			TUBEX					
		T-LPS	P-LPS	M-LPS	T-LPS	P-LPS	M-LPS	TF	bTF	PA	bPA	12T	12P
Group A1 (≤ 11 days after fever onset)													
T33a	10	M	H	H	L	H	M	7	6	1	1	7	3
T35a	9	H	H	H	H	H	H	5	ND	6	0	7	6
T39a	8	H	M	L	H	H	H	3	ND	6	0	8	9
T45a	8	H	M	M	H	H	H	6	ND	8	0	7	7
T53a	11	M	M	L	H	H	H	2	ND	2	0	6	4
T55a	10	H	H	H	H	H	H	6	ND	9	0	8	8
T59a	10	H	H	H	L	M	M	5	ND	3	0	5	5
T67a	8	H	M	L	H	H	H	5	ND	4	0	4	5
T69a	8	M	M	M	H	H	H	4	3	7	0	4	6
T73a	8	M	L	-	H	H	H	3	ND	7	0	6	5
Group A1 sensitivity								9/10 90.0%		8/10 80.0%		10/10 100%	10/10 100%
Group A2 (≥ 17 days after fever onset)													
T33b	19	M	M	M	L	M	M	6	ND	0	0	5	2
T35b	22	H	H	H	H	H	H	7	ND	8	0	9	8
T37a	24	H	H	H	H	H	H	6	ND	2	0	8	5
T37b	28	H	H	M	H	H	H	5	5	2	0	8	5
T39b	21	H	M	L	H	H	H	4	5	8	0	9	9
T45b	23	H	H	M	H	H	H	5	ND	8	0	8	8
T53b	23	H	H	M	H	H	H	4	4	4	0	8	9
T55b	20	H	H	H	H	H	H	6	ND	8	0	8	7
T57b	20	H	H	M	M	H	H	4	4	2	0	6	4
T59b	24	H	H	M	M	H	M	4	4	2	0	6	6
T61a	35	M	M	L	H	H	H	6	6	5	0	8	8
T61b	50	M	M	L	H	H	H	4	ND	5	0	8	8
T65b	21	H	H	M	M	L	-	3	ND	1	0	4	4
T67b	19	H	H	M	H	H	H	6	ND	8	0	7	8
T69b	22	M	M	L	H	H	H	4	2	7	0	4	5
T71b	30	M	M	L	H	H	H	1	ND	1	0	2	3
T73b	17	M	-	-	H	H	H	3	ND	8	0	8	5
Group A2 sensitivity								16/17 94.1%		10/17 58.8%		16/17 94.1%	16/17 94.1%

Combined Group A sensitivity									25/27		18/27		26/27	26/27
									92.6%		66.7%		96.3%	96.3%
Group B														
T31a	8	H	H	M	-	-	-	4	ND	1	1	4	4	
T31b	23	M	H	M	-	L	-	5	ND	0	0	5	3	
T41a	24	H	H	H	-	-	-	6	ND	0	0	7	6	
T57a	8	H	M	L	-	M	M	3	ND	0	0	5	1	
T63a	8	H	H	M	-	-	L	6	ND	1	0	7	2	
T63b	22	M	H	M	-	L	L	5	ND	0	0	7	4	
T65a	10	H	H	M	L	-	-	3	ND	1	0	4	4	
Group B sensitivity									7/7		0/7		7/7	5/7
									100%		0%		100%	71.4%
Group C														
T41b	38	-	-	L	-	-	-	1	ND	0	0	1	0	
T43a	9	-	-	-	-	-	-	2	ND	1	0	0	0	
T43b	21	-	-	-	-	-	-	1	ND	0	0	0	0	
T49a	7	-	-	-	-	-	-	1	ND	1	0	2	0	
T49b	23	-	-	-	-	-	-	2	ND	1	0	3	0	
T51a	8	-	-	-	-	-	-	1	ND	0	0	2	0	
T51b	21	-	-	-	-	-	-	0	ND	0	0	1	0	
Group C sensitivity									0/7		0/7		1/7	0/7
									0%		0%		14.3%	0%
Group D														
T47a	9	-	M	-	H	H	H	2	ND	6	0	6	8	
T47b	22	-	M	L	H	H	H	4	2	7	0	8	9	
T71a	7	-	L	-	H	H	H	0	ND	0	0	1	2	
Group D sensitivity									1/3		2/3		2/3	2/3
									33.3%		66.7%		66.7%	66.7%
Group (A + B) sensitivity									32/34		18/34		33/34	31/34
									94.1%		52.9%		97.1%	91.2%
Group (A + B + C) sensitivity									32/41		18/41		34/41	31/41
									78.0%		43.9%		82.9%	75.6%
Group (A + B + C + D) sensitivity									33/44		20/44		36/44	33/44
									75.0%		45.5%		81.8%	75.0%

Results expressed as ELISA grades (-, negative; L, low; M, moderate; H, high antibody levels) or TUBEX scores (0-to-10, most negative-to-most positive). Specimen 'a' and (shaded) 'b' denote 1st and 2nd specimen, respectively, from same individual; T-LPS, P-LPS and M-LPS denote LPS from *S. Typhi*, *S. Paratyphi A* and *S. Typhimurium*, respectively; bTF is TUBEX TF with added soluble *S. Paratyphi A* LPS (blocker); bPA is TUBEX PA with added soluble *S. Typhi* LPS (blocker); ND = not done.