

## Assigned Antibody Concentrations of Pneumococcal Reference Serum, Lot 89-SF

Serotype	Total antibody (mg/l)	IgG (mg/l)	IgM (mg/l)	IgA (mg/l)	References
1	10.7	6.3	1.7	1.4	1,2
2	21.37	12.24	5.13	3.88	3
3	7.9	2.4	0.6	4.3	1
4	7	4.1	1.4	1.2	1,2
5	10	5.8	4.2	1.2	1,2
6A	ND	6.05	ND	ND	3
6B	24.3	16.9	3	1.5	1,2
7F	7.3	5.2	1.9	1.1	1,2
8	11.46	5.15	1.96	2.04	3
9N	12.66	7.77	2.4	2.1	3
9V	10.2	6.9	1.6	1.7	1,2
10A	10.85	6.79	3.87	1.18	3
11A	9.31	6.44	1.04	0.95	3
12F	3.13	1.75	1.36	0.45	3
14	37	27.8	1.2	1.9	1,2
15B	26.25	16.62	1.62	3.19	3
17F	15.11	10.13	1.75	0.84	3
18C	6.7	4.5	1.3	0.8	1,2
19A	26.87	18.57	2.27	3.35	3
19F	18.8	13	3.2	2.0 *	1,2
20	13.01	8.73	1.71	0.58	3
22F	16.42	10.08	3.1	3.58	3
23F	11.9	8.1	0.7	1.3	1,2
33F	16.88	11.91	2.65	2.54	3
C-polysaccharide	ND	42.02	ND	ND	3

### References

- 1 Quataert, SA, CDLI 2:590, 1995.
- 2 Confirmed by Dr. Carl Frasch, USFDA, CBER, August 28, 1998.
- 3 Quataert, SA, et al, CDLI 11:1064, 2004.

\* The IgG anti-19F antibody concentration may be lower.  
 ND=Not Determined.