

PNEUMOCOCCUS

Key to pneumococcal antisera

<i>Streptococcus pneumoniae</i>	<i>Streptococcus pneumoniae</i> serotype	Positive capsular reaction (Neufeld) in:				Antiserum/antisera recommended for identification of type
		Pool serum	Type serum	Group serum	Factor serum	
Type 1	1	A, P	1			Type serum 1
Type 2	2	A, T	2			Type serum 2
Type 3	3	B, R	3			Type serum 3
Type 4	4	A, R	4			Type serum 4
Type 5	5	A, S	5			Type serum 5
Group 6	6A	B, Q		6	6b	Factor serum 6b
	6B	B, Q		6	6c	Factor serum 6c + 6d ¹
	6C	B, Q		6	6d	Factor serum 6d + 6c ¹
	6D	B, Q		6	6c, 6d	Factor serum 6c + 6d
Group 7	7F	C, P		7	7b	Factor sera 7b + 7c ¹
	7A	C, P		7	7c	Factor serum 7c
	7B	C, P		7	7e	Factor serum 7e
	7C	C, P		7	7f	Factor serum 7f
Type 8	8	B, S	8			Type serum 8
Group 9	9A	D, R		9	9d	Factor sera 9d + 9g ¹
	9L	D, R		9	9b	Factor sera 9b + 9e ¹
	9N	D, R		9	9b, 9e	Factor serum 9e
	9V	D, R		9	9d, 9g	Factor serum 9g
Group 10	10F	E, S		10	10b	Factor sera 10b + 10d ¹ + 10f ¹
	10A	E, S		10	10d	Factor sera 10d + 10b ¹
	10B	E, S		10	10b, 10d	Factor sera 10b + 10d
	10C	E, S		10	10b, 10f	Factor serum 10f
Group 11	11F	D, T		11	11b, 11g	Factor sera 11g + 11f ¹
	11A	D, T		11	11c	Factor sera 11c + 11b ¹
	11B	D, T		11	11b, 11f, 11g	Factor sera 11f + 11g
	11C	D, T		11	11b, 11c, 11f	Factor sera 11c + 11f
	11D	D, T		11	11b, 11c	Factor sera 11b + 11c + 11f ¹
Group 12	12F	E, R		12	12b	Factor sera 12b + 12c ¹
	12A	E, R		12	12c	Factor sera 12c + 12b ¹
	12B	E, R		12	12b, 12c, 12e	Factor serum 12e
Type 13	13	H	13			Type serum 13
Type 14	14	H, P	14			Type serum 14
Group 15	15F	H, S		15	15b, 15c	Factor sera 15b + 15c
	15A	H, S		15	15c	Factor sera 15c + 15b ¹
	15B	H, S		15	15b, 15e, 15h	Factor serum 15h
	15C	H, S		15	15e	Factor sera 15e + 15h ¹
Group 16	16F	D		16	16b	Factor serum 16b
	16A	D		16	16c	Factor serum 16c
Group 17	17F	F, S		17	17b	Factor serum 17b
	17A	F, S		17	17c	Factor serum 17c
Group 18	18F	A, Q		18	18c, 18e, 18f	Factor serum 18f
	18A	A, Q		18	18d	Factor serum 18d
	18B	A, Q		18	18e	Factor sera 18e + 18c ¹
	18C	A, Q		18	18c, 18e	Factor sera 18c + 18f ¹
Group 19	19F	B, P		19	19b	Factor serum 19b
	19A	B, P		19	19c	Factor serum 19c
	19B	B, P		19	7h	Factor sera 7h + 19f ¹
	19C	B, P		19	19f, 7h	Factor serum 19f
Type 20	20	C, T	20			Type serum 20

Key to pneumococcal antisera (continued)

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		Pool serum	Type serum	Group serum	Factor serum	
Type 21	21	E	21			Type serum 21
Group 22	22F	F, T		22	22b	Factor serum 22b
	22A	F, T		22	22c	Factor serum 22c
Group 23	23F	H, Q		23	23b	Factor serum 23b
	23A	H, Q		23	23c	Factor serum 23c
	23B	H, Q		23	23d	Factor serum 23d
Group 24	24F	C		24	24d	Factor serum 24d + 24c ¹
	24A	C		24	24c, 24d	Factor serum 24c
	24B	C		24	24e	Factor serum 24e
Group 25	25F	I		25	25b	Factor serum 25b
	25A	I		25	25c	Factor serum 25c
Type 27	27	F	27			Type serum 27
Group 28	28F	H		28	28b	Factor serum 28b
	28A	H		28	28c	Factor serum 28c
Type 29	29	G	29			Type serum 29
Type 31	31	C	31			Type serum 31
Group 32	32F	F		32	32a	Factor sera 32a + 32b ¹
	32A	F		32	32a, 32b	Factor sera 32b
Group 33	33F	E, T		33	33b	Factor sera 33b + 20b ¹
	33A	E, T		33	33b, 20b	Factor serum 20b
	33B	E, T		33	33f	Factor sera 33f + 33e ¹ + 6a ¹
	33C	E, T		33	33e	Factor serum 33e
	33D	E, T		33	33f, 6a	Factor serum 6a
Type 34	34	G	34			Type serum 34
Group 35 ²	35F	G		35	35a, 35b	Factor sera 35a + 35b
	35A	G		35	35a, 35c	Factor sera 35a + 35c + 29b ¹ + 42a ¹
	35B	G		35	35a, 35c, 29b	Factor sera 35a + 29b
	35C	G		35	35a, 35c, 42a	Factor sera 35a + 42a
Type 36	36	D	36			Type serum 36
Type 37	37	D	37			Type serum 37
Type 38	38	I	38			Type serum 38
Type 39	39	E	39			Type serum 39
Type 40	40	C	40			Type serum 40
Group 41	41F	F		41	41a, 41b	Factor serum 41b
	41A	F		41	41a	Factor sera 41a + 41b ¹
Type 42	42	G	42			Type serum 42
Type 43	43	I	43			Type serum 43
Type 44	44	I	44			Type serum 44
Type 45	45	I	45			Type serum 45
Type 46	46	I	46			Type serum 46
Group 47	47F	G		47	47a	Factor sera 47a + 43b ¹
	47A	G		47	47a, 43b	Factor serum 43b
Type 48	48	I	48			Type serum 48

23-valent vaccine types are indicated by **boldface**.

¹Use these factor antisera to exclude other types within the group.

²All types within *S. pneumoniae* group 35 have to be identified by means of Factor serum 35a, because of cross-reactions to *S. pneumoniae* types 29 and 42 in Group serum 35. Group serum 35 and factor 35a crossreact with *S. pneumoniae* type 47F. Use group serum 47 to exclude types within group 35. All types of *S. pneumoniae* will give a positive reaction in Omni-serum and Anti C-polysaccharide serum.