

Table 9. Conservancy analysis of antibody conformational epitope sequences

No.	Sequence	Source Species Subtype	Source Protein	Antibody Type(s)	Host Species	H1N1							H3N2							H5N1		
						A/Brevig Mission/1/18	A/New Caledonia/20/99	A/PR/8/34	A/Taiwan/1/86	A/Texas/36/91	A/USSR/90/77	A/WSN/33	A/Bangkok/1/79	A/Beijing/533/89	A/England/4/2/72	A/Hong Kong/1/68	A/Leningrad/360/86	A/New York/6/2/004	A/Panama/2007/99	A/UDORN/30/772	A/Hong Kong/1/59/97	A/Viet Nam/1/194/2004
1	A198, S199, R201	H3N2	HA	MONOCLONAL; POLYCLONAL	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	D147, H150, H197, D198, E199, K221, D251	H3N2	NA	MONOCLONAL	MOUSE	43	43	43	43	43	43	43	57	86	57	57	71	71	100	57	57	43
3	D147, H150, R152, T153, P154, H197, D198, E199, W218, S219, K220, K221, I222, G248, R249, A250, D251	H3N2	NA	MONOCLONAL	MOUSE	29	35	41	35	35	35	35	76	88	71	71	82	82	100	76	29	29
4	D188, Q189, R201	H3N2	HA	MONOCLONAL	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	E152, G155, Q188, N189, Q192, E194	H1N1	HA	MONOCLONAL	MOUSE	50	50	100	50	50	50	50	50	50	50	50	50	50	50	50	50	50
6	E189, D190, E219	H1N1	HA	MONOCLONAL	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	G129, Y155, S157, G158, S159	H3N2	HA	MONOCLONAL	MOUSE	60	60	60	60	60	60	60	80	60	60	80	60	60	60	100	60	60
8	G129, Y155, S157, G158, S159, A160, Q189	H3N2	HA	MONOCLONAL	MOUSE	57	57	57	57	57	57	57	57	57	57	71	57	57	57	86	57	57
9	G129, Y155, S159	H3N2	HA	MONOCLONAL	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	67
10	G135, K140, G142, S145, G158	H3N2	HA	MONOCLONAL	MOUSE	60	60	60	60	60	60	60	60	60	80	100	60	80	80	100	60	60
11	G47, I48, T49, N50, K51, V52, N53, S54, I55, I56, D57, K58, T318, G319, P320, R321, N322	H5N2	HA	MONOCLONAL	MOUSE	29	35	35	35	35	35	35	35	35	35	35	35	29	29	35	35	35
12	G49, K50, L59, D60, I62, D63, P74, H75, V78, F79, R90, K92, F94, P143, D271, P273, I274, D275	H3N2	HA	MONOCLONAL	MOUSE	28	28	28	28	28	28	33	67	61	83	100	67	56	61	89	28	28
13	I369, A370, S371, L399, N400, T401, D402, W403, P433, K434, E435, D436, K437, Q317, Y318, I319, C320, S321, P343, G344, N345, N346, N347, N348	H11N9	NA	MONOCLONAL	MOUSE	42	29	38	29	29	29	38	25	25	25	25	25	25	25	25	38	38
14	I51, C52, N53, N54, T276, C277, I278, S279	H3N2	HA	MONOCLONAL	MOUSE	38	38	38	38	38	38	50	63	63	100	100	63	50	50	100	38	38
15	K129, G159, E189	H1N1	HA	MONOCLONAL	MOUSE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
16	K129, V132, K157	H1N1	HA	MONOCLONAL	MOUSE	67	67	67	67	67	67	67	100	100	67	100	100	100	100	100	67	67
17	K142, G143, K172, E219, G225, A227	H1N1	HA	POLYCLONAL	CHICKEN	67	67	67	67	67	100	67	67	67	67	67	67	67	67	67	67	67
18	K148, S198, S364, D395, N396	H3N8	NA	MONOCLONAL	MOUSE	60	60	60	60	60	60	60	80	60	80	60	60	60	80	60	60	60
19	K50, L59, D60, I62, D63, P74, H75, V78, F79, R90, K92, F94, G142, D271	H3N2	HA	MONOCLONAL	MOUSE	29	29	29	29	29	29	29	71	64	86	100	71	50	57	93	29	29
20	L70, L71, V73, R74, S75, E115	H1N1	HA	MONOCLONAL	MOUSE	67	67	100	67	67	67	83	50	50	50	50	50	50	50	50	67	67
21	N329, T332, K336, Y341, N344, S367, I368, K432	H11N9	NA	MONOCLONAL	MOUSE	67	67	67	100	67	67	67	67	67	100	100	67	67	67	100	100	67
22	N329, T332, K336, Y341, N344, S367, I368, K432	H13N9	NA	MONOCLONAL	MOUSE	63	50	50	50	50	50	38	50	50	50	50	50	50	50	50	50	50
23	P124, N125, E154, S156, P158, K159, K161, N162, S163	H1N1	HA	MONOCLONAL	MOUSE	56	44	78	44	44	44	78	44	44	44	44	44	44	44	44	56	56
24	P326, R327, N329, P328, N344, N347, I366, S367, I368, A369, S370, S372, L399, N400, T401, D402, W403, P431, K432	H11N9	NA	MONOCLONAL	MOUSE	42	26	37	26	26	26	32	37	26	37	26	26	32	37	37	37	37
25	P326, R327, P328, D329, N344, N347, I366, S367, I368, A369, S370, S372, L399, N400, T401, D402, W403, P431, K432	H11N9	NA	MONOCLONAL	MOUSE	37	26	37	26	26	26	32	32	26	32	32	26	26	32	32	32	32
26	P326, R327, P328, N329, N344, N347, I366, S367, R368, A369, S370, S372, L399, N400, T401, D402, W403, P431, K432	H11N9	NA	MONOCLONAL	MOUSE	37	32	42	32	32	32	37	37	32	37	32	32	32	37	37	42	42
27	P328, N329, D330, P331, T332, Y341, G343, N344, I366, I368, A369, S370, S372, N400, T401, W403	H13N9	NA	MONOCLONAL	MOUSE	31	38	31	38	31	31	38	31	31	31	31	31	31	31	31	31	31
28	P330, N331, N346, N347, S368, I369, A370, S371, S373, N400, T401, W403, K434	H11N9	NA	MONOCLONAL	MOUSE	46	38	38	38	38	38	31	31	31	38	38	31	31	31	38	46	46
29	Q100, T156, G196	H7N7	HA	MONOCLONAL	MOUSE	67	67	67	67	67	67	67	100	100	100	100	100	100	100	100	67	67
30	Q189, V196, A198	H3N2	HA	MONOCLONAL	MOUSE	67	100	67	100	100	100	100	67	67	100	100	67	67	67	100	100	67
31	S127, D135, T179, N183, T188, L216	H9N2	HA	MONOCLONAL	MOUSE	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
32	S127, T129, K147, P152, T179, T188	H9N2	HA	MONOCLONAL	MOUSE	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
33	S136, G139, S141, R220, D221	H1N1	HA	MONOCLONAL	MOUSE	100	100	100	80	100	80	100	60	60	60	60	60	60	60	60	60	60
34	S186, R220, R229, I230	H3N2	HA	MONOCLONAL	MOUSE	75	75	75	100	100	100	75	75	75	100	100	75	75	75	100	75	75
35	S364, D395, N396	H3N8	NA	MONOCLONAL	MOUSE	100	100	100	67	100	67	67	100	67	100	67	67	67	67	67	100	100
36	S367, S372, N400	H11N9	NA	MONOCLONAL	MOUSE	67	100	67	100	100	67	67	100	100	100	100	100	100	100	100	100	100
37	S368, S373, N400, T401, K434	NA	NA	MONOCLONAL	MOUSE	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
38	T131, G134, S136, S145, W153, T155, K156, S17, G158, E190, S193, L194, L226	H3N2	HA	MONOCLONAL	MOUSE	69	54	38	38	38	38	77	54	46	69	92	54	54	31	85	54	54
39	T318, G319, L320, R321, N322, G47, I48, T49, N50, K51, V52, N53, S54, V55, I56, E57, K58	HA	HA	MONOCLONAL	MOUSE	29	41	29	29	29	29	35	41	41	41	41	41	29	29	41	35	35
40	V165, G169, I178, S203, G236, S250	H1N1	HA	MONOCLONAL	MOUSE	67	67	100	67	67	67	83	67	67	67	67	67	67	67	67	67	67
41	Y155, S157, S159	H3N2	HA	MONOCLONAL	MOUSE	67	67	67	67	67	67	67	100	67	67	67	67	67	67	100	67	67
42	Y155, S157, G158, N193	H3N2	HA	MONOCLONAL	MOUSE	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
43	Y155, S159, T188, D189, T193, A198, S199, R201	H3N2	HA	MONOCLONAL	MOUSE	50	50	38	50	50	50	50	63	50	50	50	50	50	50	63	50	50
44	K432, W403, T401, N400, S372, Y341, A369, I368, S367, I366, P, 342, Y343, N329, T332, P331, D330, N344, G343, D330, P328, N200	H11N9	NA	MONOCLONAL	MOUSE	40	25	35	25	25	25	25	35	25	35	25	25	30	35	35	35	35

Identity level color code:
 Yellow: 100%
 Magenta: ≥90%
 Green: ≥80%