

Table S1. Clonal lineages of antibodies from TIV subjects.

Lineage ID	Subject ID	Isotype	V _H	J _H	CDR H3 length	Light chain	V _L	J _L	CDR L3 length	Number of lineage members	Percent influenza reactive
860 [†]	TIV01	G1	1-2	6	19	λ	3-21	2	11	3	100%
2461	TIV01	G1	3-7	5	17	λ	3-1	2	9	2	100%
1261	TIV01	G1	3-9	6	20	κ	1-33	4	9	4	75%
1250	TIV01	G1	3-15	3	12	λ	1-40	2	11	2	100%
1945	TIV01	G1	3-23	3	16	κ	3-15	4	10	2	100%
2155	TIV01	G1	3-30	3	15	λ	1-40	3	11	2	0%
693	TIV01	A1	3-30	6	17	κ	3-20	2	10	3	100%
688	TIV01	G1	3-30	6	17	λ	1-44	3	11	8	88%
648	TIV01	G1	3-30	6	24	κ	1-33	4	9	2	100%
1347	TIV01	G1	3-48	5	11	λ	3-21	1	11	2	100%
690*	TIV01	G1	3-49	4	18	λ	1-51	2	12	12	92%
1285	TIV01	G1	3-49	4	18	κ	1-33	4	9	2	0%
652	TIV01	G1	4-4	6	23	λ	3-19	2	12	9	88%
1329	TIV01	A1 (2), A2 (1)	4-30	6	18	κ	3-20	2	10	3	100%
1258	TIV01	G1	4-30	6	18	κ	3-20	2	10	2	50%
1255	TIV01	G1	4-30	6	18	κ	3-20	3	10	2	50%
1270	TIV01	G1 (1), A1 (1)	4-59	5	15	λ	2-14	1	10	2	100%
1310	TIV01	G1	4-59	6	20	λ	1-44	2	11	2	50%
1251	TIV01	G1 (1), A1 (1)	4-59	6	19	λ	1-44	3	11	2	100%
641*	TIV01	G1 (10), A1 (9)	4-59	6	19	κ	1-39	2	9	19	89%
649	TIV01	G1	4-59	6	19	κ	1-39	4	9	2	100%
1277	TIV01	G1 (3), A1 (1)	4-59	6	19	κ	3-20	1	8	4	100%
638	TIV01	G1	4-59	6	19	κ	1-39	4	12	2	100%
640	TIV01	G1	4-59	6	19	κ	1-17	1	9	3	100%
1342	TIV01	G1	4-59	6	19	κ	1-39	4	10	3	100%
1953	TIV01	G1	4-59	6	19	λ	3-21	2	12	2	100%
643*	TIV01	G1	4-59	6	19	κ	1-39	3	10	17	94%
639	TIV01	G1	4-59	6	19	κ	1-39	1	9	5	100%
687	TIV01	G1	4-59	6	19	κ	3-11	4	11	5	100%
1301	TIV01	G1	4-59	6	19	κ	1-39	2	9	2	100%
1332	TIV01	G1	4-59	6	19	κ	1-39	2	11	2	100%
1300	TIV01	G1 (2), A1 (1)	4-b	6	19	λ	7-43	3	11	2	50%
2775	TIV04	M	3-7	4	14	λ	1-44	3	11	4	100%
2774	TIV04	G1	4-31	4	20	λ	3-10	3	11	2	50%
2735	TIV21	G1	1-2	4	12	λ	3-21	2	10	2	100%
2731	TIV21	G1 (1), A1 (1)	1-2	5	14	κ	1-39	5	9	2	100%
2737*	TIV21	A1	2-5	3	19	κ	1-17	2	9	8	100%
2747	TIV21	G1	3-30	2	15	κ	1-39	1	9	2	100%
2740	TIV21	G1	4-39	1	15	κ	2-28	5	9	3	100%
2756	TIV21	G1	4-39	3	17	κ	1-5	1	9	3	100%
2940	TIV24	G1 (1), E (1)	3-7	1	10	λ	1-44	2	12	2	100%
2902	TIV24	G1	3-7	4	10	λ	1-44	2	12	5	100%
2897	TIV24	G1	3-13	6	21	κ	3-20	4	10	4	100%
2976	TIV24	G1	3-13	6	21	κ	3-20	4	10	2	100%
2899	TIV24	G1 (2), A1 (1)	3-23	3	15	κ	1-33	5	9	3	100%

No clonal lineages were identified in mAbs derived from subject TIV14.

*Trees for these clonal lineages appear in Figure 3 (lineage 641), Figure S9 online (lineage 643), and Figure S10 online (lineages 690 and 2737).

[†]Tree for this clonal lineage appears in Whittle J, Zhang R, Khurana S, King LR, Manischewitz J, Golding H, Dormitzer PR, Haynes BF, Walter EB, Moody MA, Kepler TB, Liao H-X, Harrison SC. Broadly neutralizing human antibody that recognizes the receptor-binding pocket of influenza virus hemagglutinin. *Proc Nat Acad Sci USA* in press (2011).

Antibodies from a given TIV subject were identified as being a clonal lineage if they met the following criteria.

- 1) Inferred heavy and light chain rearrangements used the same V and J segments.
- 2) CDR 3 length are identical for both heavy and light chains.
- 3) 70% or greater nucleotide identity within CDR 3 for both heavy and light chains.