

Table S11. Characteristics of cross-reactive rmAbs.

| Subject ID | mAb ID | Lineage* | Isotype | V _H | J _H | CDR H3 length | Light chain | V _L | J _L | CDR L3 length | Reactivities [‡] | | | | | | | | | |
|------------|--------|----------|---------|----------------|----------------|---------------|-------------|----------------|----------------|---------------|---------------------------|---------|-------|---------|---------|------|-------|---------|---------|---------|
| | | | | | | | | | | | H1 SI | H3 Wisc | TIV07 | H1 Bris | H3 Bris | BFla | TIV08 | H3 Jobg | H5 Indo | H5 Viet |
| TIV01 | 671 | 639 | G1 | 4-59 | 6 | 19 | κ | 1-39 | 1 | 9 | ● | ○ | | | ● | | ● | | | |
| TIV01 | 1108 | N/A | G1 | 3-74 | 4 | 17 | κ | 3-20 | 2 | 10 | | ● | | ● | | | ● | | | |
| TIV01 | 1122 | N/A | G1 | 3-48 | 4 | 14 | κ | 1-5 | 1 | 7 | ● | ○ | | ● | | | | | ● | |
| TIV01 | 1213 | N/A | G1 | 1-69 | 4 | 11 | κ | 3-20 | 2 | 9 | ● | ○ | ● | | | | ○ | | ● | ● |
| TIV01 | 1223 | N/A | G1 | 3-30 | 4 | 25 | λ | 1-40 | 3 | 11 | ● | ○ | ● | | | | | ● | ● | ● |
| TIV01 | 1290 | N/A | G1 | 3-74 | 4 | 12 | λ | 2-14 | 2 | 12 | ● | ○ | ● | | | | | | ● | ● |
| TIV01 | 1314 | N/A | G1 | 3-23 | 4 | 16 | κ | 3-15 | 2 | 10 | ● | ○ | ● | | | | | | ● | ● |
| TIV01 | 1823 | 1945 | G1 | 3-23 | 3 | 16 | κ | 3-15 | 4 | 10 | ● | ○ | ● | | | | | | ● | ● |
| TIV01 | 1835 | 1945 | G1 | 3-23 | 3 | 16 | κ | 3-15 | 4 | 10 | ● | ○ | ● | | | | | | ● | ● |
| TIV21 | 2348 | 2731 | A1 | 1-2 | 5 | 14 | κ | 1-39 | 5 | 9 | | ● | | | ● | | ○ | ● | | |
| TIV21 | 2358 | N/A | A1 | 3-23 | 4 | 16 | κ | 3-15 | 4 | 10 | ● | | ● | | | | ○ | | | ● |
| TIV21 | 2385 | 2731 | G1 | 1-2 | 5 | 14 | κ | 1-39 | 5 | 9 | | ● | | | ● | | ○ | ● | | |
| TIV24 | 2568 | 2976 | G1 | 3-13 | 6 | 21 | κ | 3-20 | 4 | 10 | ● | | | ● | ● | | ○ | | | |
| TIV24 | 2576 | N/A | G1 | 3-22 | 3 | 22 | λ | 3-1 | 3 | 9 | | ● | | | ● | | ○ | ● | | |
| EI02 | 2178 | N/A | G1 | 4-59 | 5 | 9 | λ | 1-40 | 1 | 11 | | ● | | | ● | | | ● | | |
| EI03 | 1941 | N/A | G1 | 1-69 | 6 | 16 | κ | 1-39 | 4 | 9 | | ● | | | ● | | | ● | | |
| EI03 | 1949 | N/A | A1 | 2-70 | 4 | 17 | λ | 1-40 | 3 | 11 | | ● | | | ● | | ○ | ● | | |
| EI03 | 1965 | N/A | G1 | 1-18 | 3 | 18 | κ | 1-5 | 2 | 11 | | ● | ○ | | ● | | ○ | ● | | ● |
| EI03 | 2026 | N/A | G1 | 1-69 | 4 | 16 | κ | 3-15 | 2 | 11 | | ● | ○ | | ● | | ○ | ● | | |
| EI07 | 1894 | N/A | G1 | 1-2 | 4 | 14 | κ | 1-33 | 4 | 9 | | ● | | | ● | | ○ | ● | | |
| EI13 | 2207 | 2569 | A1 | 1-46 | 3 | 10 | κ | 2-24 | 2 | 9 | | ● | ○ | ● | ● | ● | ○ | ● | | |
| EI13 | 2210 | 2569 | M | 1-46 | 3 | 10 | κ | 2-24 | 2 | 9 | | ● | | | ● | | | ● | | |
| EI13 | 2214 | N/A | G1 | 3-23 | 6 | 22 | κ | 3-15 | 2 | 10 | | ● | | | ● | | | | ● | |
| EI13 | 2217 | 2569 | M | 1-46 | 3 | 10 | κ | 2-24 | 2 | 9 | | ● | ○ | | ● | ● | | ● | | |
| EI13 | 2221 | 2569 | M | 1-46 | 3 | 10 | κ | 2-24 | 2 | 9 | ● | ● | ○ | ● | ● | ● | | ● | | |
| EI13 | 2276 | N/A | A1 | 1-2 | 4 | 19 | λ | 1-47 | 3 | 11 | | ● | | | ● | | ○ | ● | | |
| EI13 | 2325 | N/A | G1 | 3-11 | 4 | 16 | κ | 2-28 | 4 | 17 | | ● | ○ | | ● | | ○ | ● | | |

*Lineage ID from Tables S1 and S2. N/A = not applicable

[†]H1 SI = H1 A/Solomon Islands/03/2006; H3 Wisc = H3 A/Wisconsin/67/2005; TIV07 = trivalent influenza vaccine 2007-2008 season; H1 Bris = H1 A/Brisbane/59/2007; H3Bris = H3 A/Brisbane/10/2007; BFla = HA B/Florida/04/2006; TIV08 = trivalent influenza vaccine 2008-2009 season; H3 Jobg = H3 A/Johannesburg/33/1994; H5 Indo = H5 A/Indonesia/05/2005; H5 Viet = H5 A/Vietnam/1203/2004; H1 Cal = H1 A/California/04/2009.

[‡]● = reactive with antigen. ○ = reactive with antigen but not counted toward total number of specificities because of overlap with shared antigens.