

CDR3 mutations in TRAV8-1 α chain:

| Wt | C | A | T | D | L | T | S | G | G | N | Y | K |
|-------|---|---|----------|----------|---|----------|----------|----------|----------|---|---|---|
| L110A | | | A | | T | S | G | G | | | | |
| T111A | | | | | L | A | S | G | G | | | |
| S112A | | | | | L | T | A | G | G | | | |
| G113A | | | | | L | T | S | A | G | | | |
| G114A | | | | | L | T | S | G | A | | | |
| L110C | | | C | | T | S | G | G | | | | |
| L110G | | | G | | T | S | G | G | | | | |
| L110M | | | M | | T | S | G | G | | | | |
| L110I | | | I | | T | S | G | G | | | | |
| L110V | | | V | | T | S | G | G | | | | |
| L110F | | | F | | T | S | G | G | | | | |
| T111C | | | | C | S | G | G | | | | | |
| T111S | | | | S | S | G | G | | | | | |
| T111P | | | | P | S | G | G | | | | | |
| T111D | | | | D | S | G | G | | | | | |
| T111H | | | | H | S | G | G | | | | | |
| T111K | | | | K | S | G | G | | | | | |
| S112T | | | | | L | T | T | G | G | | | |
| S112N | | | | | L | T | N | G | G | | | |
| S112K | | | | | L | T | K | G | G | | | |

Supplemental Figure 4: List of amino acid substitutions evaluated in the CDR3 region of the CEA:691-699 reactive murine TCR α chain (TRAV8-1*01 TRAJ6*01).