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# DENV1

## GTS1SP

|        | TRBV   | CDR3               | TRBJ | Freq (%) |
|--------|--------|--------------------|------|----------|
| 1-1166 | 12-3/4 | CASSLGSYEQY        | 2-7  | 18.31    |
|        | 11-2   | CASSLVGGTPSYNEQF   | 2-1  | 15.49    |
|        | 11-2   | CASSLFAGGPDQY      | 2-3  | 11.27    |
|        | 12-3/4 | CASSWGAEEAF        | 1-1  | 11.27    |
|        | 12-3/4 | CASSLGLPTLY        | 2-3  | 9.86     |
|        | 11-2   | CASSLVIPGTGWRDNEQF | 2-1  | 5.63     |
|        | 7-3    | CASSLNNSGAGELF     | 2-2  | 5.63     |
|        | 5-5    | CASSRHGSGVDQPOH    | 1-5  | 4.23     |
|        | 11-2   | CASSLAVGGYEQY      | 2-7  | 2.82     |
|        | 12-3/4 | CASSPGTLYGYT       | 1-2  | 2.82     |
|        | 12-3/4 | CASSLGNNEQF        | 2-1  | 2.82     |
|        | 11-2   | CASSLVFAGGTSTDQY   | 2-3  | 1.41     |
|        | 11-2   | CASSLVFAGGISTDTQY  | 2-3  | 1.41     |
|        | 5-5    | CASSRHGPGVDQPOH    | 1-5  | 1.41     |
|        | 12-3/4 | CASSFFPGSGETQY     | 2-5  | 1.41     |
|        | 11-2   | CASSTRGGGGEQY      | 2-7  | 1.41     |
|        | 12-3/4 | CASSWGSQDTQY       | 2-3  | 1.41     |
|        | 12-3/4 | CASSLGAGELF        | 2-2  | 1.41     |

|        | TRBV   | CDR3           | TRBJ | Freq (%) |
|--------|--------|----------------|------|----------|
| 1-2528 | 12-3/4 | CASSPGTAEEAF   | 1-1  | 28.95    |
|        | 12-3/4 | CASSWGSYEQF    | 2-1  | 23.68    |
|        | 12-3/4 | CASSLGGKYSF    | 2-1  | 18.42    |
|        | 12-3/4 | CASSPGTDEAF    | 1-1  | 15.79    |
|        | 7-8    | CASSLTAGTQETQY | 2-5  | 11.84    |
|        | 12-3/4 | CASSSGSYEQF    | 2-1  | 1.32     |

|        | TRBV   | CDR3           | TRBJ | Freq (%) |
|--------|--------|----------------|------|----------|
| 2-0600 | 11-2   | CASSLAGGGAYEQY | 2-7  | 38.20    |
|        | 12-3/4 | CASSIGVETQY    | 2-5  | 28.09    |
|        | 12-3/4 | CASSPGTLHGYT   | 1-2  | 19.10    |
|        | 11-2   | CASSQGGGNYEQY  | 2-7  | 13.48    |
|        | 12-3/4 | CASSPGTGELF    | 2-2  | 1.12     |

# DENV1/DENV2

## GTS1SP

|        | TRBV | CDR3           | TRBJ | Freq (%) |
|--------|------|----------------|------|----------|
| 2-1452 | 9    | CASSRGSAETQY   | 2-5  | 45.12    |
|        | 11-2 | CASSFGGGAQETQY | 2-5  | 41.46    |
|        | 11-2 | CASSLGPEDTQY   | 2-3  | 13.41    |

|        | TRBV   | CDR3                | TRBJ | Freq (%) |
|--------|--------|---------------------|------|----------|
| 2-2781 | 12-3/4 | CASNLTGETQY         | 2-5  | 11.94    |
|        | 11-2   | CASSLGPDNEQF        | 2-1  | 10.45    |
|        | 12-3/4 | CASSPGVEKLF         | 1-4  | 7.46     |
|        | 12-3/4 | CASSLVPEAF          | 1-1  | 7.46     |
|        | 11-2   | CASPTPLWGDQETQY     | 2-5  | 5.97     |
|        | 11-2   | CASSLYQGGEQF        | 2-1  | 5.97     |
|        | 12-3/4 | CASSSGSYEQY         | 2-7  | 5.97     |
|        | 11-2   | CASSLGSAEAF         | 1-1  | 5.97     |
|        | 11-2   | CASSLAVRSSSYNEQF    | 2-1  | 4.48     |
|        | 12-5   | CASSPGQESYEQY       | 2-7  | 4.48     |
|        | 12-3/4 | CASSPGANGYT         | 1-2  | 4.48     |
|        | 7-3    | CASSLRLRLAGALRNYEQY | 2-7  | 2.99     |
|        | 11-2   | CASSLGGSGRVMGGEQF   | 2-1  | 2.99     |
|        | 11-2   | CASSLGQGEQY         | 2-7  | 2.99     |
|        | 27     | CASSPSEATNTGELF     | 2-2  | 1.49     |
|        | 11-2   | CASSLGAGTADFGYT     | 1-2  | 1.49     |
|        | 12-3/4 | CASSQIAGGTDQY       | 2-3  | 1.49     |
|        | 12-3/4 | CASSFTGSSYEQY       | 2-7  | 1.49     |
|        | 11-2   | CASNLTGGEGDQY       | 2-5  | 1.49     |
|        | 11-2   | CASSLTGTATEAF       | 1-1  | 1.49     |
|        | 6-1    | CASSVYTGTEAF        | 1-1  | 1.49     |
|        | 12-3/4 | CASSLTGENTY         | 1-3  | 1.49     |
|        | 12-3/4 | CASSLGGAEEAF        | 1-1  | 1.49     |
|        | 12-3/4 | CASSPGAGELF         | 2-2  | 1.49     |
|        | 12-3/4 | CASNPGAGELF         | 2-2  | 1.49     |

|        | TRBV   | CDR3           | TRBJ | Freq (%) |
|--------|--------|----------------|------|----------|
| 1-2368 | 12-3/4 | CASPTPLWNTAEAF | 1-1  | 43.55    |
|        | 12-3/4 | CASSPGTEHGYT   | 1-2  | 19.35    |
|        | 12-3/4 | CASSLGSYEQY    | 2-7  | 14.52    |
|        | 3-1    | CASSGGTSFREQF  | 2-1  | 6.45     |
|        | 12-3/4 | CASSPGGARAF    | 1-1  | 6.45     |
|        | 12-3/4 | CASSRGSGELF    | 2-2  | 3.23     |
|        | 12-3/4 | CASSPGSHEAF    | 1-1  | 3.23     |
|        | 20-1   | CSATMGGTDQPOH  | 1-5  | 1.61     |
|        | 12-3/4 | CASNPGSYEQY    | 2-7  | 1.61     |

**Supplementary Figure 1** TRBV and TRBJ usage, CDR3 $\beta$  amino acid sequence, and clonotype frequency are shown for CD3<sup>+</sup>CD8<sup>+</sup>CD14<sup>-</sup>CD19<sup>-</sup> HLA-A\*11:01-GTS1 tetramer<sup>+</sup> populations isolated from patients with primary DENV1 infection or sequential DENV1/DENV2 infections. Recurrent clonotypes are highlighted in color. SP, single positive.