SUPPLEMENTAL MATERIAL

Zika virus non-structural protein 1 antigen-capture immunoassay

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Figure S1: Antigen capture assay shows consistency between runs.

Two runs using the same preparation of anti-ZIKV NS1 pAbs. P<0.0001, as determined through Spearman correlation.



Figure S2: ZIKV NS1 Capture ELISA does not display interference from substances in patient serum.

Antibodies against NS1 were dissociated from antigen via detergent and assayed for increased activity using the antigen capture ELISA. A: The assay was still able to detect ZIKV NS1 well in both N-ELISA (dissociation solution was neutralized before addition of NS1) and D-ELISA (dissociation solution was neutralized in the presence of NS1). B: No significant difference was seen in ZIKV NS1 detection in patient samples between N-ELISA and D-ELISA conditions as determined by Mann-Whitney test.



Figure S3: Reactivity of NS1 antibodies without cross-adsorption.

A: Related Flavivirus reactivity using NS1 antibodies non-adsorbed against DENV NS1 shows binding at a high percentage of ZIKV NS1 levels. B: Comparison of ZIKV NS1 reactivity using adsorbed and non-adsorbed NS1 antibodies shows higher signal intensities of cross-adsorbed antibodies to ZIKV NS1 protein.

**Table S1: Primer sequences used for the generation and mutation of ZIKV/DENV NS1**

|  |  |
| --- | --- |
| **Primer Designation** | **Primer Sequence** |
| ZIKV NS1 WT F | 5’-ATCGATGGATCCCGTGGGGTGCTCAGTGGAC-3’ |
| ZIKV NS1 WT R | 5’- ATCGATAAGCTTTTATGACCCCGCTGTCACCA-3’ |
| DENV2 NS1 WT F | 5’- ATCGATGGATCCCGATAGTGGTTGCGTTGTG – 3’ |
| DENV2 NS1 WT R | 5’-ATCGATGCGGCCGCCTTAGGCTGTGACCAAGGAGC-3’ |
| 117, 118, 119-AAA F | 5’-ATGAGCTGCCCCATGGCTGGAAAGCCGCTGCAGCATCGTATTTTGTTAGG-3’ |
| 117, 118, 119-AAA R | 5’-CTGTTGTTGGTCTTTGCCGCCCTAACAAAATACGATGCTGCAGCGGCTTTC CAGCCG-3’ |
| 227, 228, 229-AAA F | 5’-GAATGGCCAAAGTCTGCCGCTGCCTGGACAGATGGAGTAGAAGAAAGTGATC TTATCATACCC-3’ |
| 227, 228, 229-AAA R | 5’-CTCCATCTGTCCAGGCAGCGGCAGACTTTGGCCATTCACATGTTTTCATCTCAA TCAGGTG-3’ |

Table S2: Primers used for the Generation of Flavivirus NS1 Proteins

|  |  |
| --- | --- |
|  Primer Designation | Primer Sequence |
|  SLEV NS1 WT F | 5’- ATCGATGGATCCCGCTGATTCGGGATGTGCA -3’ |
|  SLEV NS1 WT R | 5’- ATCGATAAGCTTTTAAGCTGTCACTCGAGATTT– 3’ |
|  WNV NS1 WT F | 5’- ATCGATGGATCCCGACACTGGGTGTGCCATA -3’ |
|  WNV NS1 WT R | 5’- ATCGATGCGGCCGCTTAAGCATTCACTTGTGACTG– 3’ |
|  YFV NS1 WT F | 5’- ATCGATCAATTGCCAAGGATGCGCCATCAAC -3’ |
|  YFV NS1 WT R | 5’ - ATCGATGCGGCCGCTTATATTTCTCCAGCTGTAAC – 3’ |

Table S3: NS1/IgM/IgG Levels in Surveyed Patient Serum

Sample ID numbers beginning with Z originate from Colombia, while those beginning with DR originate from the Dominican Republic.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sample ID | IgM WT | IgM 117-119 | IgM 227-229 | IgG WT | IgG 117-119 | IgG 227-229 | NS1 Concentration (ng/mL) |
| Z-10 | 0.18675 | 0.13835 | 0.12285 | 1.20945 | 1.11725 | 1.14445 | 82.05 |
| Z-100 | 0.18045 | 0.12485 | 0.12275 | 0.59875 | 0.7307 | 0.61055 | 83.98 |
| Z-101 | 0.1868 | 0.1559 | 0.10545 | 1.88775 | 1.86325 | 1.82465 | ND |
| Z-102 | 0.1221 | 0.1034 | 0.0889 | 1.41885 | 1.4985 | 1.4237 | 221.8 |
| Z-103 | 0.5427 | 0.34535 | 0.1813 | 0.12735 | 0.0831 | 0.07875 | 73.8 |
| Z-104 | 0.19075 | 0.1023 | 0.0616 | 0.4231 | 0.4824 | 0.4387 | 11.68 |
| Z-105 | 0.3016 | 0.19225 | 0.12755 | 1.77325 | 1.7653 | 1.76545 | 10.48 |
| Z-106 | 0.5318 | 0.31145 | 0.1454 | 1.05435 | 1.18865 | 1.1215 | 60.99 |
| Z-107 | 0.1959 | 0.10525 | 0.0644 | 0.8615 | 1.04225 | 0.93125 | 54.11 |
| Z-110 | 0.35795 | 0.2078 | 0.09665 | 1.78745 | 1.78155 | 1.7858 | 625.48 |
| Z-115 | 0.18385 | 0.1088 | 0.04575 | 1.86325 | 1.82935 | 1.6451 | 354.03 |
| Z-116 | 0.1003 | 0.0811 | 0.07025 | 1.9695 | 2.05525 | 1.97125 | 50.31 |
| Z-117 | 0.11065 | 0.07645 | 0.05305 | 1.9428 | 1.92395 | 1.95725 | ND |
| Z-118 | 0.0924 | 0.08855 | 0.0584 | 1.88995 | 1.87645 | 1.8721 | 36.34 |
| Z-119 | 0.2128 | 0.14365 | 0.1116 | 1.7582 | 1.75715 | 1.7436 | ND |
| Z-12 | 0.1454 | 0.10885 | 0.17605 | 2.13385 | 1.99755 | 2.00915 | ND |
| Z-120 | 0.5909 | 0.8051 | 0.55625 | 1.6434 | 1.65535 | 1.632 | 72.17 |
| Z-121 | 0.1013 | 0.09255 | 0.05955 | 1.7243 | 1.7405 | 1.69705 | 81.26 |
| Z-122 | 0.26625 | 0.1755 | 0.11025 | 1.46965 | 1.56365 | 1.5706 | 101.9 |
| Z-123 | 0.32225 | 0.2368 | 0.1847 | 1.9463 | 1.983 | 1.97375 | ND |
| Z-124 | 0.10315 | 0.0859 | 0.0675 | 1.85715 | 1.8266 | 2.00635 | 17.93 |
| Z-125 | 0.10775 | 0.09165 | 0.0798 | 0.14495 | 0.13275 | 0.11665 | ND |
| Z-126 | 0.59 | 1.13835 | 1.14065 | 1.8974 | 1.90265 | 1.86705 | ND |
| Z-127 | 0.28025 | 0.341 | 0.3252 | 1.9503 | 1.9229 | 1.84155 | 21.25 |
| Z-128 | 0.2137 | 0.1842 | 0.14925 | 1.77175 | 1.71435 | 1.59895 | ND |
| Z-129 | 0.335 | 0.29555 | 0.2833 | 1.4611 | 1.5747 | 1.4368 | ND |
| Z-13 | 0.1848 | 0.12995 | 0.1248 | 1.79835 | 1.73535 | 1.7803 | ND |
| Z-130 | 0.2383 | 0.1407 | 0.39475 | 0.9602 | 1.1003 | 0.95095 | 88.2 |
| Z-131 | 0.15395 | 0.1328 | 0.1037 | 2.00515 | 1.896 | 1.9032 | 219.51 |
| Z-132 | 0.13245 | 0.1287 | 0.11295 | 2.0958 | 1.95755 | 2.0976 | ND |
| Z-133 | 0.1442 | 0.12745 | 0.1121 | 1.83025 | 1.8161 | 1.8482 | ND |
| Z-134 | 0.1425 | 0.1176 | 0.0942 | 0.7335 | 0.636 | 0.5691 | 233.32 |
| Z-135 | 0.10035 | 0.0925 | 0.06955 | 1.9588 | 1.91895 | 1.90325 | ND |
| Z-136 | 0.29165 | 0.27365 | 0.26655 | 1.4938 | 1.53255 | 1.38375 | ND |
| Z-137 | 0.1748 | 0.1166 | 0.09645 | 0.73785 | 0.77865 | 0.6258 | 36.02 |
| Z-138 | 0.2014 | 0.1909 | 0.2081 | 0.21675 | 0.2691 | 0.19655 | ND |
| Z-139 | 0.2412 | 0.1951 | 0.1497 | 1.87225 | 1.8687 | 1.84365 | ND |
| Z-14 | 0.2553 | 0.24155 | 0.2261 | 1.9442 | 1.86725 | 1.95525 | ­̶­̶ |
| Z-140 | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | 269.39 |
| Z-141 | 0.2237 | 0.1593 | 0.1923 | 1.0021 | 1.24345 | 1.29265 | 58.7 |
| Z-142 | 0.245 | 0.2791 | 0.27705 | 0.28615 | 0.34375 | 0.2863 | ND |
| Z-143 | 0.42235 | 0.274 | 0.22865 | 1.65795 | 1.717 | 1.6307 | 387.84 |
| Z-144 | 0.1385 | 0.1042 | 0.07425 | 2.01175 | 1.94975 | 1.85175 | ND |
| Z-145 | 0.50845 | 0.44485 | 0.40785 | 1.88245 | 1.8902 | 1.81805 | ND |
| Z-146 | 0.3082 | 0.20185 | 0.11865 | 1.7067 | 1.825 | 1.723 | ND |
| Z-147 | 0.07735 | 0.0752 | 0.0489 | 1.30535 | 1.3551 | 1.3287 | ND |
| Z-148 | 0.3067 | 0.2744 | 0.24635 | 1.8125 | 1.76145 | 1.85785 | 30.3 |
| Z-149 | 0.28285 | 0.24735 | 0.19545 | 1.97425 | 1.93575 | 2.00455 | 84.92 |
| Z-150 | 0.2269 | 0.1854 | 0.12305 | 1.8652 | 1.8393 | 1.8893 | ND |
| Z-151 | 0.27795 | 0.2344 | 0.1948 | 1.911 | 1.9248 | 1.88705 | ND |
| Z-152 | 0.28935 | 0.24915 | 0.2001 | 1.483 | 1.6654 | 1.4719 | ND |
| Z-153 | 0.3201 | 0.24765 | 0.23835 | 1.55675 | 1.7059 | 1.6278 | ND |
| Z-154 | 0.0911 | 0.0858 | 0.07965 | 1.85525 | 1.97365 | 1.89725 | ND |
| Z-155 | 0.2276 | 0.1663 | 0.1441 | 1.75755 | 1.87555 | 1.79605 | 2224.9 |
| Z-157 | 0.0973 | 0.0973 | 0.0583 | 2.0347 | 2.0291 | 1.88515 | 1970.42 |
| Z-158 | 0.29395 | 0.29395 | 0.16985 | 1.96405 | 1.91655 | 1.76825 | 215.39 |
| Z-159 | 0.10485 | 0.10485 | 0.05615 | 0.16 | 0.13385 | 0.10675 | 29.22 |
| Z-16 | 0.4187 | 0.2703 | 0.33215 | 2.0692 | 1.94725 | 2.06395 | 45.99 |
| Z-160 | 0.1442 | 0.1442 | 0.0574 | 1.55275 | 1.5792 | 1.4184 | 131.56 |
| Z-161 | 0.3592 | 0.3592 | 0.12335 | 2.04005 | 1.9368 | 1.811 | 311.05 |
| Z-162 | 0.3122 | 0.3122 | 0.1169 | 0.8183 | 0.78715 | 0.6504 | ND |
| Z-163 | 0.22695 | 0.22695 | 0.13395 | 1.4193 | 1.4626 | 1.2019 | ND |
| Z-164 | 0.4344 | 0.4344 | 0.22625 | 0.9534 | 0.9789 | 0.7495 | 136.43 |
| Z-165 | 0.3721 | 0.3721 | 0.21275 | 1.9818 | 1.9589 | 1.80145 | 110.54 |
| Z-166 | 0.4125 | 0.4125 | 0.25475 | 1.72945 | 1.72055 | 1.4958 | ND |
| Z-167 | 0.2901 | 0.2901 | 0.20045 | 1.8583 | 1.85295 | 1.80355 | ND |
| Z-168 | 0.10585 | 0.10585 | 0.07455 | 0.4654 | 0.4438 | 0.7577 | ND |
| Z-169 | 0.36165 | 0.36165 | 0.17725 | 1.10865 | 1.06755 | 1.15185 | 75.23 |
| Z-17 | 0.347 | 0.19665 | 0.20805 | 1.37585 | 1.1515 | 1.316 | 104.32 |
| Z-170 | 0.31445 | 0.31445 | 0.2202 | 0.20205 | 0.1584 | 0.9291 | 80.62 |
| Z-171 | 0.25225 | 0.25225 | 0.15275 | 1.4979 | 1.53325 | 1.4431 | 123.14 |
| Z-172 | 0.25345 | 0.25345 | 0.14675 | 1.7365 | 1.73045 | 1.39885 | 44.95 |
| Z-173 | 0.1864 | 0.1864 | 0.0476 | 1.88295 | 1.8239 | 1.77385 | ND |
| Z-174 | 0.31205 | 0.31205 | 0.1711 | 1.4173 | 1.40435 | 1.36255 | 30.32 |
| Z-175 | 0.133 | 0.133 | 0.1222 | 1.80045 | 1.8371 | 1.816 | 75.87 |
| Z-176 | 0.07065 | 0.07065 | 0.04755 | 1.19785 | 1.22845 | 1.2073 | ND |
| Z-177 | 0.11585 | 0.11585 | 0.06905 | 1.51245 | 1.5014 | 1.446 | 393.65 |
| Z-178 | 0.3342 | 0.3342 | 0.2245 | 1.97355 | 1.9264 | 1.83475 | 99.65 |
| Z-179 | 0.1483 | 0.1483 | 0.0924 | 1.88545 | 1.8379 | 1.68495 | ND |
| Z-18 | 0.82585 | 0.8989 | 0.8764 | 2.17995 | 2.08175 | 2.1593 | ND |
| Z-180 | 0.20385 | 0.20385 | 0.1001 | 1.5866 | 1.59005 | 1.3541 | ND |
| Z-181 | 0.21545 | 0.21545 | 0.1011 | 1.79655 | 1.70395 | 1.70775 | 154.22 |
| Z-182 | 0.2531 | 0.2531 | 0.77915 | 1.96735 | 1.90445 | 1.86915 | 76.67 |
| Z-183 | 0.1187 | 0.1187 | 0.0737 | 1.8534 | 1.81235 | 1.8609 | 290.05 |
| Z-185 | 0.11005 | 0.11005 | 0.0667 | 0.48025 | 0.4041 | 0.4594 | ND |
| Z-187 | 0.11115 | 0.11115 | 0.076 | 2.07605 | 1.94445 | 1.90215 | 426.76 |
| Z-188 | 0.29945 | 0.29945 | 0.14505 | 2.02945 | 1.8909 | 1.85105 | 148.28 |
| Z-189 | 0.1754 | 0.1754 | 0.06205 | 1.7437 | 1.59945 | 1.58855 | 88.93 |
| Z-19 | 0.28355 | 0.19635 | 0.2093 | 0.40865 | 0.30955 | 0.32515 | ND |
| Z-191 | 0.23635 | 0.23635 | 0.16105 | 2.16735 | 2.02285 | 1.96965 | 81.34 |
| Z-192 | 0.42055 | 0.3672 | 0.3458 | 0.6123 | 0.8245 | 0.8703 | 128.7 |
| Z-193 | 0.13585 | 0.09715 | 0.09015 | 2.04405 | 2.153 | 2.0501 | ND |
| Z-194 | 0.19975 | 0.1472 | 0.15495 | 0.27455 | 0.2828 | 0.25855 | 974.72 |
| Z-195 | 0.7876 | 0.6972 | 0.7514 | 1.44715 | 1.6799 | 1.6835 | 58.36 |
| Z-196 | 0.2498 | 0.1925 | 0.17915 | 0.98695 | 1.25535 | 1.23515 | ND |
| Z-197 | 0.4337 | 0.2904 | 0.3699 | 0.9509 | 1.1214 | 1.0011 | 76.86 |
| Z-198 | 0.24885 | 0.20025 | 0.20225 | 0.8044 | 0.87015 | 0.85485 | ND |
| Z-199 | 0.27275 | 0.26885 | 0.2395 | 2.0184 | 2.13165 | 2.0367 | 64.69 |
| Z-20 | 0.20355 | 0.1613 | 0.17315 | 1.69 | 1.6782 | 1.6789 | ND |
| Z-200 | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | 1277.94 |
| Z-202 | 0.4921 | 0.50295 | 0.5169 | 1.92995 | 2.0421 | 2.01765 | ND |
| Z-21 | 0.64465 | 0.55325 | 0.49085 | 0.8335 | 0.85725 | 0.8142 | ND |
| Z-22 | 0.3695 | 0.28635 | 0.2406 | 1.9451 | 1.8883 | 1.8351 | ND |
| Z-23 | 0.25055 | 0.19355 | 0.17165 | 1.9541 | 1.86585 | 1.876 | ND |
| Z-237 | 0.31225 | 0.15925 | 0.1819 | 0.20945 | 0.1734 | 0.17695 | ­̶­̶ |
| Z-238 | 0.1825 | 0.1115 | 0.11135 | 0.48935 | 0.59735 | 0.6182 | ­̶­̶ |
| Z-239 | 0.1682 | 0.0951 | 0.10215 | 0.38095 | 0.41435 | 0.4214 | ­̶­̶ |
| Z-24 | 0.2169 | 0.16275 | 0.1614 | 2.006 | 1.88895 | 1.9052 | 554.32 |
| Z-240 | 0.1566 | 0.10155 | 0.10785 | 0.36965 | 0.392 | 0.4085 | ­̶­̶ |
| Z-241 | 0.30035 | 0.21315 | 0.22715 | 0.6306 | 0.74915 | 0.7864 | ­̶­̶ |
| Z-242 | 0.19815 | 0.14335 | 0.1403 | 0.4009 | 0.66125 | 0.7135 | ­̶­̶ |
| Z-243 | 0.1527 | 0.08845 | 0.0845 | 0.41205 | 0.36935 | 0.35185 | ­̶­̶ |
| Z-244 | 0.2309 | 0.1578 | 0.15525 | 0.4848 | 0.4492 | 0.48665 | ­̶­̶ |
| Z-245 | 0.1382 | 0.0975 | 0.09775 | 0.24245 | 0.22545 | 0.2328 | ­̶­̶ |
| Z-246 | 0.09275 | 0.0592 | 0.06615 | 0.22445 | 0.2415 | 0.23645 | ­̶­̶ |
| Z-247 | 0.2952 | 0.27395 | 0.27515 | 0.4086 | 0.4947 | 0.5101 | ­̶­̶ |
| Z-248 | 0.1991 | 0.133 | 0.1341 | 0.7241 | 0.732 | 0.75715 | ­̶­̶ |
| Z-249 | 0.148 | 0.10925 | 0.11235 | 0.33705 | 0.34745 | 0.3316 | ­̶­̶ |
| Z-25 | 0.19095 | 0.1324 | 0.12165 | 1.9869 | 1.89005 | 1.923 | ND |
| Z-250 | 0.5324 | 0.34425 | 0.3553 | 0.3516 | 0.42515 | 0.4041 | ­̶­̶ |
| Z-251 | 0.09235 | 0.0899 | 0.07505 | 0.78945 | 0.84745 | 0.8697 | ­̶­̶ |
| Z-252 | 0.18625 | 0.12565 | 0.1345 | 0.41425 | 0.51015 | 0.5498 | ­̶­̶ |
| Z-253 | 0.12585 | 0.07495 | 0.0855 | 0.43485 | 0.5486 | 0.57155 | ­̶­̶ |
| Z-254 | 0.35375 | 0.1805 | 0.20305 | 0.3387 | 0.3844 | 0.40415 | ­̶­̶ |
| Z-255 | 0.078 | 0.0602 | 0.0692 | 0.5039 | 0.60715 | 0.64475 | ­̶­̶ |
| Z-256 | 0.12205 | 0.12705 | 0.1374 | 1.53605 | 1.6347 | 1.7081 | ­̶­̶ |
| Z-257 | 0.11355 | 0.0805 | 0.08995 | 0.0689 | 0.0606 | 0.0566 | ­̶­̶ |
| Z-258 | 0.11525 | 0.09205 | 0.09775 | 0.28385 | 0.2433 | 0.22905 | ­̶­̶ |
| Z-259 | 0.1749 | 0.14505 | 0.19065 | 0.23905 | 0.2813 | 0.2836 | ­̶­̶ |
| Z-26 | 0.15945 | 0.1306 | 0.13065 | 1.9216 | 1.788 | 1.78975 | ND |
| Z-260 | 0.33095 | 0.2642 | 0.30345 | 0.62425 | 0.6791 | 0.7911 | ­̶­̶ |
| Z-261 | 0.4041 | 0.3056 | 0.33405 | 0.7203 | 0.82835 | 0.54735 | ­̶­̶ |
| Z-262 | 0.21545 | 0.14235 | 0.1518 | 0.4352 | 0.498 | 0.5098 | ­̶­̶ |
| Z-263 | 0.2176 | 0.20705 | 0.17805 | 0.5991 | 0.66525 | 0.68235 | ­̶­̶ |
| Z-27 | 0.15365 | 0.12485 | 0.1293 | 1.84135 | 1.8062 | 1.7312 | ND |
| Z-34 | 0.2789 | 0.20765 | 0.19255 | 1.8773 | 1.79885 | 1.6591 | 365.27 |
| Z-35 | 0.22015 | 0.16155 | 0.1375 | 1.0025 | 0.9052 | 0.71785 | POS |
| Z-36 | 0.14855 | 0.1264 | 0.1194 | 2.1073 | 1.9994 | 1.8656 | 365.27 |
| Z-37 | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ND |
| Z-38 | 0.1719 | 0.16195 | 0.14875 | 2.10595 | 2.0817 | 1.96995 | ND |
| Z-39 | 0.16675 | 0.1427 | 0.1192 | 2.09365 | 1.9209 | 1.7449 | ND |
| Z-40 | 0.17235 | 0.16625 | 0.14095 | 1.48305 | 1.4563 | 1.41175 | ND |
| Z-41 | 0.3676 | 0.29905 | 0.2539 | 2.14975 | 2.1056 | 2.0478 | ND |
| Z-42 | 0.67045 | 0.66385 | 0.7727 | 2.0505 | 1.95535 | 1.89305 | 465.1 |
| Z-43 | 0.1818 | 0.1472 | 0.14725 | 2.0818 | 2.10905 | 2.0259 | 91.12 |
| Z-44 | 0.4155 | 0.4032 | 0.3232 | 2.3109 | 2.2325 | 2.17765 | ND |
| Z-45 | 0.48665 | 0.3742 | 0.34065 | 0.45845 | 0.4349 | 0.31215 | 201.6 |
| Z-46 | 0.2071 | 0.16555 | 0.1741 | 1.8365 | 1.85515 | 1.67285 | ND |
| Z-47 | 0.15955 | 0.15785 | 0.1416 | 2.1065 | 2.0067 | 1.88715 | 360.25 |
| Z-48 | 0.24085 | 0.22315 | 0.23305 | 1.2557 | 1.44425 | 1.52445 | 123.75 |
| Z-49 | 0.11125 | 0.10595 | 0.1159 | 1.98955 | 2.0442 | 2.072 | ND |
| Z-5 | 0.29525 | 0.17095 | 0.17285 | 1.65425 | 1.35015 | 1.66575 | ND |
| Z-50 | 0.1386 | 0.11185 | 0.1124 | 0.43375 | 0.46675 | 0.44475 | ND |
| Z-51 | 0.1436 | 0.1051 | 0.11255 | 1.29315 | 1.31895 | 1.3803 | ND |
| Z-52 | 0.21265 | 0.1838 | 0.19555 | 1.44415 | 1.70945 | 1.83175 | ND |
| Z-53 | 0.18045 | 0.17015 | 0.1329 | 0.1907 | 0.18475 | 0.1806 | 51.47 |
| Z-54 | 0.0749 | 0.09405 | 0.08075 | 2.09555 | 2.05075 | 2.02425 | 76.16 |
| Z-55 | 0.22445 | 0.25075 | 0.2255 | 1.71515 | 1.78425 | 1.79875 | 27.05 |
| Z-56 | 0.20445 | 0.19705 | 0.1481 | 1.82595 | 1.8049 | 1.8126 | 254.81 |
| Z-57 | 0.15025 | 0.1468 | 0.1024 | 2.07765 | 2.03085 | 1.97875 | ND |
| Z-58 | 0.15925 | 0.17075 | 0.1391 | 2.03995 | 2.0355 | 1.94085 | 469.02 |
| Z-59 | 0.1048 | 0.09575 | 0.0707 | 2.08135 | 2.0572 | 1.99555 | 108.6 |
| Z-6 | 0.19395 | 0.1413 | 0.1339 | 2.107 | 1.9163 | 2.0794 | 370.44 |
| Z-60 | 0.2042 | 0.17785 | 0.1629 | 1.7426 | 1.7212 | 1.6583 | ND |
| Z-61 | 0.2194 | 0.23165 | 0.16095 | 0.47285 | 0.56115 | 0.64465 | 224.81 |
| Z-62 | 0.1419 | 0.144 | 0.1157 | 2.07165 | 2.0312 | 1.98715 | 152.12 |
| Z-63 | 0.25645 | 0.20925 | 0.15845 | 2.10235 | 2.0378 | 2.04585 | ND |
| Z-64 | 0.1291 | 0.12755 | 0.0963 | 1.6099 | 1.65585 | 1.7214 | ND |
| Z-66 | 0.2315 | 0.2182 | 0.15595 | 1.7724 | 1.7806 | 1.8385 | ND |
| Z-67 | 0.16785 | 0.17585 | 0.1531 | 2.0853 | 2.0432 | 2.01585 | ND |
| Z-68 | 0.21665 | 0.20305 | 0.1379 | 2.09215 | 2.0181 | 1.9697 | ND |
| Z-69 | 0.31725 | 0.2699 | 0.2126 | 2.21645 | 2.26165 | 2.1225 | ND |
| Z-70 | 0.32695 | 0.3293 | 0.2473 | 2.1993 | 2.11595 | 2.0914 | ND |
| Z-71 | 0.2809 | 0.28905 | 0.21715 | 1.77255 | 1.82185 | 1.8841 | ND |
| Z-72 | 0.0637 | 0.0516 | 0.059 | 0.94465 | 1.10855 | 1.27405 | 36.16 |
| Z-73 | 0.31675 | 0.2257 | 0.22825 | 1.6721 | 1.73375 | 1.7611 | 49.1 |
| Z-74 | 0.56095 | 0.59825 | 0.6439 | 1.5507 | 1.5711 | 1.6324 | 38.05 |
| Z-75 | 0.36255 | 0.2715 | 0.25755 | 1.504 | 1.5071 | 1.5382 | 658.88 |
| Z-76 | 0.1216 | 0.1092 | 0.09945 | 1.96815 | 1.91585 | 1.887 | 49.11 |
| Z-77 | 0.1078 | 0.1047 | 0.0757 | 0.22335 | 0.1913 | 0.1759 | 158.09 |
| Z-78 | 0.2708 | 0.2242 | 0.1825 | 2.20895 | 2.05345 | 2.0541 | 122.35 |
| Z-79 | 0.0883 | 0.07305 | 0.0625 | 2.0178 | 1.959 | 1.9714 | ND |
| Z-8 | 0.1418 | 0.09255 | 0.0989 | 1.6074 | 1.45935 | 1.5757 | ND |
| Z-80 | 0.44495 | 0.38285 | 0.35135 | 0.61575 | 0.5669 | 0.64285 | 2112.88 |
| Z-81 | 0.22855 | 0.18065 | 0.1472 | 1.6462 | 1.60735 | 1.7455 | POS |
| Z-82 | 0.61205 | 0.4922 | 0.50405 | 0.5077 | 0.47085 | 0.49835 | 1008.49 |
| Z-83 | 0.2784 | 0.195 | 0.2174 | 0.25675 | 0.23915 | 0.26535 | 137.49 |
| Z-84 | 0.1354 | 0.09125 | 0.09075 | 0.65685 | 0.4402 | 0.6209 | 50.1 |
| Z-85 | 0.1751 | 0.1282 | 0.1181 | 1.57815 | 1.548 | 1.59465 | ND |
| Z-86 | 0.201 | 0.13375 | 0.134 | 0.89355 | 0.4379 | 0.43415 | ND |
| Z-87 | 0.31065 | 0.25375 | 0.2445 | 1.75145 | 1.7602 | 1.78615 | ND |
| Z-88 | 0.22535 | 0.147 | 0.14695 | 1.76875 | 1.72965 | 1.7167 | 3184.7 |
| Z-89 | 0.0649 | 0.0559 | 0.0519 | 1.77665 | 1.7198 | 1.7254 | 20.77 |
| Z-9 | 0.2573 | 0.16085 | 0.1561 | 2.0518 | 1.97985 | 1.96435 | 433.98 |
| Z-90 | 0.17595 | 0.11085 | 0.078 | 1.591 | 1.59325 | 1.61665 | 182.59 |
| Z-91 | 0.51245 | 0.3611 | 0.28335 | 1.4643 | 1.5779 | 1.47095 | 495.49 |
| Z-92 | 0.1176 | 0.10955 | 0.09285 | 1.5224 | 1.5916 | 1.52355 | ND |
| Z-93 | 0.0769 | 0.0652 | 0.05905 | 1.5744 | 1.59625 | 1.46795 | ND |
| Z-94 | 0.15855 | 0.11015 | 0.0966 | 1.49695 | 1.6053 | 1.5803 | 24.22 |
| Z-95 | 0.46565 | 0.3215 | 0.2407 | 1.2856 | 1.41575 | 1.36525 | 905.43 |
| Z-96 | 0.1444 | 0.1057 | 0.0945 | 1.5691 | 1.66045 | 1.62075 | ND |
| Z-97 | 0.49495 | 0.53765 | 0.49565 | 1.8198 | 1.78635 | 1.84395 | 304.61 |
| Z-98 | 0.3182 | 0.20135 | 0.1508 | 1.6306 | 1.6692 | 1.5995 | ND |
| Z-99 | 0.7843 | 0.97365 | 0.78625 | 1.54175 | 1.6126 | 1.53885 | 55.92 |
| DR 1 | 0.022 | 0.024 | 0.023 | 0.284 | 0.409 | 0.3765 | 30.47 |
| DR 2 | 0.098 | 0.095 | 0.096 | 0.763 | 0.7895 | 0.726 | ­̶­̶ |
| DR 4 | 0.043 | 0.056 | 0.058 | 0.035 | 0.0285 | 0.028 | ND |
| DR 7 | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | 54.91 |
| DR 8 | 0.036 | 0.052 | 0.049 | 0.0265 | 0.023 | 0.0105 | 91.3 |
| DR 9 | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | ­̶­̶ | 20.43 |
| DR 10 | 0.0455 | 0.0375 | 0.042 | 0.669 | 0.772 | 0.7405 | ND |
| DR 11 | 0.0595 | 0.0875 | 0.0835 | 0.096 | 0.1285 | 0.0945 | 5.71 |
| DR 12 | 0.013 | 0.0195 | 0.0185 | 0.241 | 0.2285 | 0.1585 | ND |
| DR 13 | 0.048 | 0.056 | 0.0525 | 0.5825 | 0.737 | 0.6345 | 66.81 |
| DR 14 | 0.116 | 0.123 | 0.14 | 0.131 | 0.1625 | 0.1285 | 173.48 |
| DR 15 | 0.0805 | 0.0805 | 0.0785 | 0.048 | 0.066 | 0.052 | 83.24 |
| DR 17 | 0.0635 | 0.0845 | 0.08 | 1.253 | 1.2075 | 1.103 | 31.91 |
| DR 18 | 0.067 | 0.071 | 0.0685 | 0.053 | 0.23 | 0.102 | 83.24 |
| DR 19 | 0.055 | 0.0675 | 0.0655 | 0.393 | 0.495 | 0.465 | ND |
| DR 20 | 0.068 | 0.0715 | 0.071 | 1.2845 | 1.1915 | 0.878 | 2.37 |
| DR 21 | 0.047 | 0.066 | 0.071 | 0.1 | 0.1575 | 0.076 | 20.64 |
| DR 22 | 0.0645 | 0.0765 | 0.074 | 0.364 | 0.386 | 0.2585 | ND |
| DR 23 | 0.1195 | 0.1535 | 0.147 | 0.2815 | 0.388 | 0.2565 | 30.27 |
| DR 24 | 0.1055 | 0.121 | 0.116 | 0.218 | 0.355 | 0.259 | 34.18 |
| DR 25 | 0.0185 | 0.031 | 0.0305 | 0.0615 | 0.0735 | 0.054 | ND |
| DR 26 | 0.053 | 0.062 | 0.064 | 0.95 | 1.038 | 0.575 | ND |
| DR 27 | 0.0365 | 0.0425 | 0.043 | 0.0295 | 0.0235 | 0.0205 | ND |
| DR 28 | 0.053 | 0.075 | 0.074 | 0.044 | 0.033 | 0.013 | 73.3 |
| DR 29 | 0.0835 | 0.0945 | 0.0955 | 0.06 | 0.0855 | 0.0305 | ND |
| DR 30 | 0.099 | 0.108 | 0.103 | 0.1915 | 0.162 | 0.077 | 9.26 |
| DR 31 | 0.022 | 0.024 | 0.0245 | 0.042 | 0.055 | 0.0235 | 23.81 |
| DR 32 | 0.027 | 0.039 | 0.0425 | 0.294 | 0.48 | 0.2655 | ND |
| DR 33 | 0.0605 | 0.0705 | 0.0685 | 0.327 | 0.4385 | 0.257 | ND |
| DR 34 | 0.1805 | 0.178 | 0.1735 | 0.99 | 0.925 | 0.4695 | 115.73 |
| DR 35 | 0.115 | 0.12 | 0.1275 | 0.2825 | 0.5005 | 0.4775 | 4.97 |
| DR 36 | 0.0375 | 0.064 | 0.038 | 0.233 | 0.308 | 0.1095 | 358.6 |
| DR 37 | 0.1075 | 0.155 | 0.156 | 0.179 | 0.199 | 0.075 | 169.11 |
| DR 38 | 0.0475 | 0.0625 | 0.0615 | 0.4125 | 0.3965 | 0.1735 | 1171.01 |
| DR 39 | 0.06 | 0.086 | 0.084 | 0.414 | 0.5475 | 0.2575 | 65.48 |
| DR 40 | 0.036 | 0.0525 | 0.056 | 0.0335 | 0.022 | 0.008 | 157.99 |
| DR 41 | 0.1435 | 0.16 | 0.1485 | 0.047 | 0.0685 | 0.024 | 264.38 |

POS: Positive, but below limit of quantification. DR: Dominican Republic. 117-119= ZIKV NS1 W117A, G118A, K119A. 227-229= ZIKV NS1 H227A, T228A, L229A.