**Table S1. E106/DENV1-DIII interface**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DIII** | | | **E106** | **Distance(Å)** |
| *Van der Waals contactsa* | | | | |
| LysE307 (C) | TrpH98 (C2) | | | 3.59 |
| LysE307 (C) | TrpH98 (C3) | | | 3.90 |
| LysE325  (C) | TrpH98 (C2) | | | 3.59 |
| LysE325 (C) | TrpH98 (C1) | | | 3.70 |
| LysE325 (C) | TrpH98 (C2) | | | 3.86 |
| TyrE326 (C) | TrpH98 (C2) | | | 3.76 |
| GluE327 (C) | TrpH98 (C2) | | | 3.89 |
| GluE327 (C) | TrpH98 (C2) | | | 3.65 |
| GluE327 (C) | TrpH98 (C2) | | | 3.88 |
| GluE327 (C) | IleH96 (C) | | | 3.73 |
| ThrE329 (C) | AsnH52 (C) | | | 3.68 |
| ThrE329 (C2) | TyrH33 (C1) | | | 3.75 |
| ThrE329 (C2) | TyrH33 (C1) | | | 3.65 |
| ThrE329 (C2) | TyrH32 (C) | | | 3.71 |
| ThrE329 (C2) | TyrH32 (C) | | | 3.76 |
| ThrE329 (C2) | GlyH31 (C) | | | 3.59 |
| AspE330 (C) | ArgH53 (C) | | | 3.88 |
| LysE361 (C) | TyrH33  (C) | | | 3.32 |
| LysE361 (C) | TyrH33 (C2) | | | 3.74 |
| LysE361 (C) | TyrH33 (C) | | | 3.67 |
| LysE361 (C) | TyrH33 (C1) | | | 3.68 |
| LysE361 (C) | TyrH33 (C1) | | | 3.45 |
| GluE362 (C) | LeuL94 (C1) | | | 3.76 |
| GluE362 (C) | LeuL94 (C) | | | 3.77 |
| *Electrostatic interactionsb* | | | | |
| LysE310 (N) | AspL30 (O2) | | | 2.75 |
| LysE310 (N) | AspL30 (O1) | | | 3.02 |
| LysE325 (N) | AspL32 (O1) | | | 3.51 |
| LysE325 (N) | AspL32 (O2) | | | 3.88 |
| LysE325 (N) | GluL50 (O1) | | | 2.69 |
| GluE362 (O2) | ArgH95 (N1) | | | 3.88 |
| LysE361 (N) | GluH50 (O2) | | | 3.03 |
| LysE361 (N) | GluH50 (O1) | | | 3.51 |
| LysE325 (N) | GluL50 (O2) | | | 3.20 |
| LysE307 (N) | GluL50 (O1) | | | 3.50 |
| *Direct hydrogen bondsc* | | | | |
| LysE325 (N) | | GluL50 (O1) | | 2.69 |
| GluE327 (O1) | | AsnH97 (N) | | 2.87 |
| GluE327 (O2) | | TrpH98  (N) | | 2.68 |
| ThrE329 (O) | | AsnH52 (N2) | | 2.97 |
| ThrE329 (O1) | | IleH30  (O) | | 2.66 |
| ThrE329 (O1) | | ArgH53 (N2) | | 2.81 |
| ThrE329 (O1) | | ArgH53 (N | | 2.97 |
| LysE310(N) | | AspL30 (O2) | | 2.75 |
| LysE361 (N | | GluH50 (O2) | | 3.03 |
| *Indirect (solvent mediated) hydrogen bondsc* | | | | |
| GluE362 (O1) | | LeuL94 (N) | |  |
| LysE361 (O) | | TrpH98 (N1) | |  |
| GluE362 (O1) | | ArgH95 (N1) | |  |
| GluE362 (O2) | | ArgH95 (N2) | |  |
| GluE327 (O2) | | ArgH95 (N) | |  |

*a*Van der Waals interactions defined in Ligplot [1], *b*electrostatic interactions as defined by PISA [2] and *c*hydrogen bonds as defined by HBPLUS [3] in Ligplot.

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