**Supplementary file 2.** **Interactions between PfCyRPA and the c12 Fab**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| van der Waals interactions | | | | |
| PfCyRPA residue | c12 residue  (CDR; # of contacts) | | | |
| Asn45 | Arg50 (CDR1L; 1) Asn51 (CDR1L; 3) Ser87 (framework; 5) | | | |
| Val46 | Arg50 (CDR1L; 4) | | | |
| Pro47 | Arg50 (CDR1L; 7) | | | |
| His76 | Tyr112 (CDR3L; 6) | | | |
| Tyr78 | Phe70 (CDR2L; 3) Asp52 (CDR1L; 4) | | | |
| Thr89 | Phe70 (CDR2L; 9) | | | |
| Leu90 | Phe70 (CDR2L; 2) | | | |
| Asn91 | Tyr120 (CDR3H; 6) | | | |
| Lys95 | Trp51 (CDR1H; 5) Tyr120 (CDR3H; 3) Tyr122 (CDR3H; 9) | | | |
| Glu96 | Tyr120 (CDR3H; 5) | | | |
| Phe136 | Tyr120 (CDR3H; 1) | | | |
| Tyr144 | Tyr120 (CDR3H; 4) | | | |
| Asn145 | Tyr120 (CDR3H; 2) | | | |
| Asn146 | Tyr120 (CDR3H; 3) | | | |
| Possible hydrogen-bonds | | |  | |
|  | **Light chain** |  | |
| Asn45 N2 | Asn51 O1 | |  | |
| Asn45 O1 | Ser87 O | |  | |
| Asp66 O2 | Arg50 N | |  | |
| Glu74 O1 | Thr113 O1 | |  | |
| His76 N2 | Tyr112 O | |  | |
| Tyr78 OH | Asp52 O2 | |  | |
| Thr89 O | Asn73 N2 | |  | |
|  | **Heavy chain** | |  | |
| Asp92 N | Tyr120 O | |  | |
| Tyr144 O | Tyr120 OH | |  | |

\* CDR1L denotes loop CDR1 of the light chain etc.