

## Supplementary Information

### Identification of fragments binding to SARS-CoV-2 nsp10 reveals ligand-binding sites in conserved interfaces between nsp10 and nsp14/nsp16.

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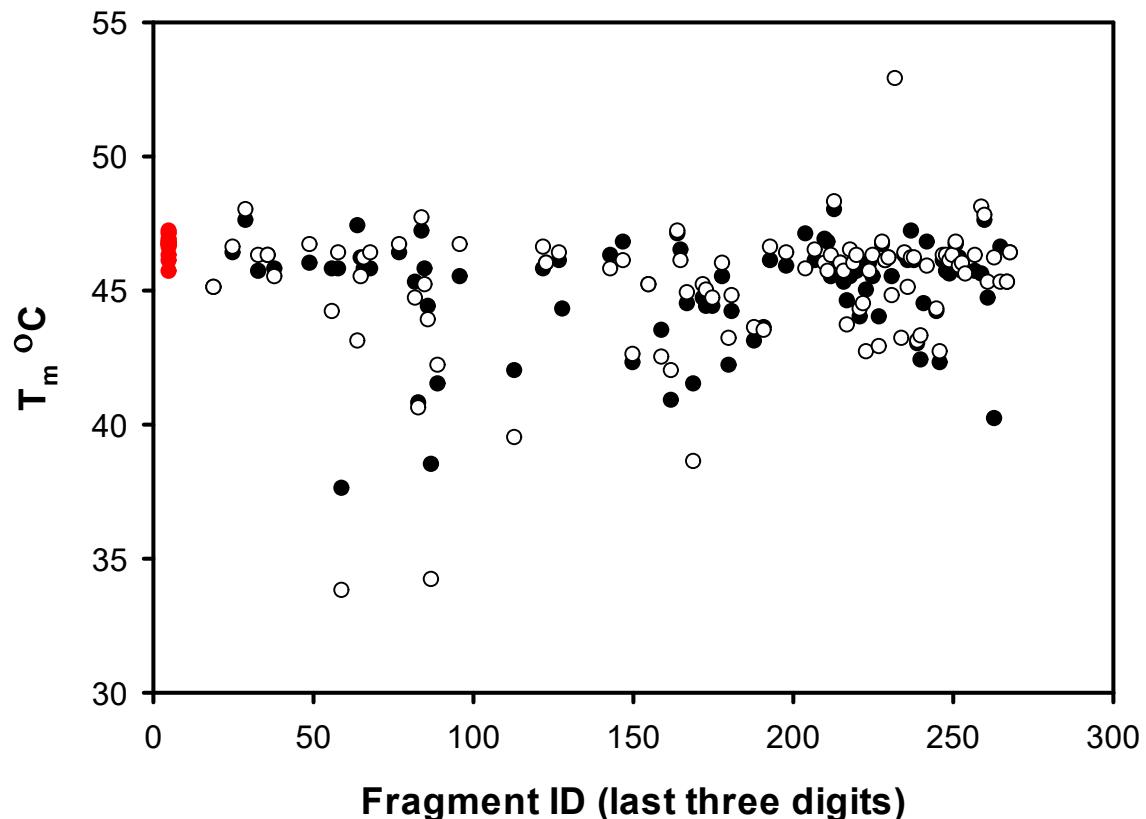
**Table S1. List of fragments from the FragMAX library used in nsp10 nanoDSF experiments.** The T<sub>m</sub> values of nsp10 in both nanoDSF experiments are given (empty in case atypical curves were obtained). The average T<sub>m</sub> of nsp10 without any ligand under the same assay conditions was determined to be 46.6 ± 0.4°C (n = 11). The two fragments that showed a T<sub>m</sub> equal or above the cut-off of 47.8°C are marked in yellow. The four fragments that were not tested in XFS are marked in light blue. The four fragments that were co-crystallised with nsp10 are marked in light green.

| Fragment ID | SMILE                          | T <sub>m</sub> °C (run 1) | T <sub>m</sub> °C (run 2) |
|-------------|--------------------------------|---------------------------|---------------------------|
| VT00019     | O=S1(=O)CC(CN1)C1=CC=CC=C1     | 45.1                      | 45.1                      |
| VT00022     | N1C=NC(=C1)C1=CC=CC=C1         |                           |                           |
| VT00025     | OC1CN(C1)C(=O)C1=CC=CC=C1      | 46.4                      | 46.6                      |
| VT00029     | OC(=O)CN1CCCCCC1=O             | 47.6                      | 48.0                      |
| VT00033     | CC1=C(C=CC(N)=C1)C(N)=O        | 45.7                      | 46.3                      |
| VT00034     | NC1=CC2=C(CCOC2)N=C1           |                           |                           |
| VT00036     | CC(=O)NC1CCNCC1                | 46.3                      | 46.3                      |
| VT00038     | O=C1NC=C(C=C1)S(=O)(=O)N1CCCC1 | 45.8                      | 45.5                      |
| VT00048     | ClC1=CC=C2NC(=O)OC2=C1         |                           |                           |
| VT00049     | NC1=CC=NN1CC1=CC=NC=C1         | 46.0                      | 46.7                      |
| VT00056     | NC1=NC(=CO1)C(F)(F)F           | 45.8                      | 44.2                      |
| VT00058     | COC1=CC=NC(=C1)C(N)=O          | 45.8                      | 46.4                      |
| VT00059     | CNC(=O)C1=CC=CS1               | 37.6                      | 33.8                      |
| VT00064     | COC1=CC(N)=CC(F)=C1            | 47.4                      | 43.1                      |

|         |                                          |      |      |
|---------|------------------------------------------|------|------|
| VT00065 | CNCC1=NC=CS1                             | 46.2 | 45.5 |
| VT00066 | CN1C=CN=C1C(O)C(F)(F)F                   | 45.8 | 46.2 |
| VT00068 | CC1=NC=C(N1)C(F)(F)F                     | 45.8 | 46.4 |
| VT00077 | CC1=CSC(CC(N)=O)=N1                      | 46.4 | 46.7 |
| VT00079 | COCl=C(C=CC=C1)C(N)=O                    |      |      |
| VT00082 | OC(=O)C1=CC2=C(NC(=O)C2)C=C1             | 45.3 | 44.7 |
| VT00083 | CC1=CC=CN2C(N)=CN=C12                    | 40.8 | 40.6 |
| VT00084 | CC1=CC=C(C=C1)S(=O)(=O)N1CCC[C@H]1C(O)=O | 47.2 | 47.7 |
| VT00085 | NC1=CC=CC2=NC=CC=C12                     | 45.8 | 45.2 |
| VT00086 | NC(=O)C1CCC2=CC=CC=C2N1                  | 44.4 | 43.9 |
| VT00087 | NC1=NC(=CN=C1)N1CCCC1                    | 38.5 | 34.2 |
| VT00089 | NC(=O)C1=CC2=C(C=NN2)C=C1                | 41.5 | 42.2 |
| VT00096 | NC1=CC(=NO1)C1CC1                        | 45.5 | 46.7 |
| VT00113 | NC1=CN=C(N=C1)N1CCOCC1                   | 42.0 | 39.5 |
| VT00118 | COCl=CC=CN=C1N                           |      |      |
| VT00122 | O=C1CC(CN1)C1CC1                         | 45.8 | 46.6 |
| VT00123 | O=C1CC(CN1)C1=CC=NC=C1                   | 46.0 | 46.0 |
| VT00127 | O=C1NN=CN1C1=CC=CC=C1                    | 46.1 | 46.4 |
| VT00128 | OC1=CC=CC(=N1)C(F)(F)F                   | 44.3 |      |
| VT00143 | NC1=CC(=CC=N1)C#N                        | 46.3 | 45.8 |
| VT00147 | CC(=O)N1CCCCC1CO                         | 46.8 | 46.1 |
| VT00150 | COCl=CC=C(C=N1)C#N                       | 42.3 | 42.6 |
| VT00154 | NCC1=CN2C=CC=CC2=N1                      |      |      |
| VT00155 | O=C1CCC2=CC=CC3=C2N1CC3                  | 45.2 | 45.2 |
| VT00159 | O1N=CC=C1C1=CC=CC=C1                     | 43.5 | 42.5 |
| VT00162 | N1C2=C(C=CC=C2)N=C1C1=CC=CN=C1           | 40.9 | 42.0 |
| VT00164 | NC(C1=CC=CN1)C(F)(F)F                    | 47.1 | 47.2 |
| VT00165 | NCC1=CC2=C(CCC2)S1                       | 46.5 | 46.1 |
| VT00167 | NC(=O)C1=C(C=CS1)C1=CC=CC=C1             | 44.5 | 44.9 |
| VT00169 | CC1=CN2C=C(N)C=CC2=N1                    | 41.5 | 38.6 |
| VT00172 | N#CC1=C2C=CNC2=NC=C1                     | 44.7 | 45.2 |
| VT00173 | NS(=O)(=O)C1=CN=CC=C1                    | 44.4 | 45.0 |
| VT00175 | O=C1NC2=CC=CC=C2C=C1                     | 44.4 | 44.7 |
| VT00178 | NC1CCN(C1=O)C1=CC=CC=C1                  | 45.5 | 46.0 |
| VT00180 | NC(=O)C1=CNC2=CC=CC=C12                  | 42.2 | 43.2 |
| VT00181 | CCS(=O)(=O)NC1=CC=CN=C1                  | 44.2 | 44.8 |
| VT00188 | FC(F)(F)C1=CC(=O)NC=C1                   | 43.1 | 43.6 |
| VT00190 | CC1=NC2=CC=CC=C2N1CCO                    |      |      |
| VT00191 | COCl=CC=CC=CN2C=N1                       | 43.6 | 43.5 |
| VT00193 | CS(=O)(=O)N1CCOCC1                       | 46.1 | 46.6 |
| VT00198 | CNC(=O)C1=CC=CC=C1                       | 45.9 | 46.4 |
| VT00204 | COCl=C1CN(C)C(=O)C1                      | 47.1 | 45.8 |
| VT00207 | COCl=CN1C=CC(N)=N1                       | 46.1 | 46.5 |
| VT00210 | CN1CCCCS1(=O)=O                          | 46.9 | 46.0 |
| VT00211 | OCC1CCCCO1                               | 46.8 | 45.7 |
| VT00212 | CC(=O)CC1=NC(=NO1)C1=CC=C(C)C=C1         | 45.5 | 46.3 |

|         |                               |      |      |
|---------|-------------------------------|------|------|
| VT00213 | CCC1=NOC(C1)C(O)=O            | 48.0 | 48.3 |
| VT00215 | COC(=O)C1=C(C)NN=C1C          | 46.0 | 46.0 |
| VT00216 | CN1C=CC=C1C(N)=O              | 45.3 | 45.7 |
| VT00217 | O=C1OCCC2=CC=CC=C12           | 44.6 | 43.7 |
| VT00218 | C1CCC2=NN=CN2C1               | 45.5 | 46.5 |
| VT00219 | CN(CC1=CC=CC=C1)C(N)=O        | 46.0 | 46.0 |
| VT00220 | CN1N=C(C=C1C(N)=O)C(F)(F)F    | 45.7 | 46.3 |
| VT00221 | NC1=CC=C2C=CC=CC2=N1          | 44.0 | 44.3 |
| VT00222 | CN(C(C)=O)C1=CC=CC=N1         | 45.9 | 44.5 |
| VT00223 | CN(C)S(=O)(=O)C1=CC=CC=C1F    | 45.0 | 42.7 |
| VT00224 | NC(=O)C1=CC=NC(Cl)=C1         | 46.0 | 45.7 |
| VT00225 | CC1=NNC(=C1)C(F)(F)F          | 45.5 | 46.3 |
| VT00226 | NC1=CC=C(C=N1)C(F)(F)F        |      |      |
| VT00227 | NC1=NC(=CO1)C1=CC=CC=C1       | 44.0 | 42.9 |
| VT00228 | COC1=NC=CC=C1C(O)=O           | 46.7 | 46.8 |
| VT00229 | OCC1=CN(CC2=CC=CC=C2)N=N1     | 46.1 | 46.1 |
| VT00230 | NC1=C(C=NN1)C1=CC=C(F)C=C1    | 46.2 | 46.2 |
| VT00231 | NCC1=CC=CN=C1N1CCCC1          | 45.5 | 44.8 |
| VT00232 | C1=CN(N=C1)C1=CC=CC=N1        |      | 52.9 |
| VT00233 | CNC1=NC=CC=C1OC               |      |      |
| VT00234 | OCC1=CN=C(N1)C1=CC=CC=C1      |      | 43.2 |
| VT00235 | CC1=CC=C(Cl)N=N1              | 46.3 | 46.4 |
| VT00236 | COC(=O)C1=CC=NN=C1            | 46.1 | 45.1 |
| VT00237 | CC(O)C1=NC(C)=CS1             | 47.2 | 46.2 |
| VT00238 | OC1=NOC2=CC=CC=C12            | 46.1 | 46.2 |
| VT00239 | CN(C)C1=CC=NC(N)=C1           | 43.0 | 43.1 |
| VT00240 | N1C=CC2=CC=CN=C12             | 42.4 | 43.3 |
| VT00241 | OC1=CC=C(Cl)N=C1              | 44.5 |      |
| VT00242 | CC1=CC(C)=NC=N1               | 46.8 | 45.9 |
| VT00243 | CN1C=NC2=C(Cl)N=CN=C12        |      |      |
| VT00245 | CC1=CC=C(S1)C1=CC(=NN1)C(O)=O | 44.2 | 44.3 |
| VT00246 | C1=NN2C=CC=CC2=N1             | 42.3 | 42.7 |
| VT00247 | CC1=NN2CCC(=O)NC2=C1          | 46.1 | 46.3 |
| VT00248 | CS(=O)(=O)N1C=CC=C1           | 45.7 | 46.3 |
| VT00249 | O=C1N[C@@@H](CO1)C1=CC=CC=C1  | 45.6 | 46.1 |
| VT00250 | O=C1NC2CCC1CC2                | 45.9 | 46.3 |
| VT00251 | O=C1CNCCN1C1=CC=CC=C1         | 46.7 | 46.8 |
| VT00252 | O=C1NCCN2CCCC12               | 46.2 | 45.9 |
| VT00253 | CC1CCC2(CC(=O)N2)CC1          | 45.7 | 46.0 |
| VT00254 | O=C1NC(=CS1)C1=CC=CN=C1       | 45.7 | 45.6 |
| VT00257 | CNS(=O)(=O)C1=C(C)ON=C1C      | 45.7 | 46.3 |
| VT00258 | COC1=C2NN=CC2=CC=C1           |      |      |
| VT00259 | COCC(=O)C1=NNC2=C1CCCC2       | 45.6 | 48.1 |
| VT00260 | CCS(=O)(=O)N1CCCC(C1)C(O)=O   | 47.6 | 47.8 |
| VT00261 | N#CC1=CC=CN=C1N1CCOCC1        | 44.7 | 45.3 |
| VT00263 | CN1CCCN(C)C1=O                |      |      |
| VT00264 | COCC1=CC=C2NC(C)=NC2=C1       | 40.2 | 46.2 |

|         |                           |      |      |
|---------|---------------------------|------|------|
| VT00265 | NC1=C2N=CNC2=CC=C1        | 46.6 | 45.3 |
| VT00267 | CN1CCCC1CO                | 45.3 | 45.3 |
| VT00268 | C1=CC=C(C=C1)C2=CSC(=N2)N | 46.4 | 46.4 |



**Figure S1. Thermal shift assays of nsp10 in the presence of fragments.** Black circles are from the first experiment and empty circles from the second one. To the left, the  $T_m$  values of nsp10 without any ligand under the assay conditions (average:  $46.6 \pm 0.4^\circ\text{C}$  ( $n=11$ )) are shown as red dots. Fragments that lead to atypical curves (Table S1) are not included in this plot.