

Table S2. Benchmarking of different settings to define accessible residues. Columns in order: Atom type determines whether accessibility definition is based on any atom or only side chain atoms; The number of atoms is the least number of accessible atoms to consider the residue as accessible; The mean size of predicted patch; The mean size of actual interface; The mean intersections between the patch and interface; The mean total number of accessible residues per chain; The mean of recall (intersection/interface); The mean of precision (intersection/patch); The mean ratio between patch size and all accessible residues; Percentage of chains in the dataset with a non-zero intersection.

| Atoms type | # atoms | Predicted patch | Actual interface | Intersection | # Residues | Recall | Precision | to all | Percentage |
|--------------------------|---------|-----------------|------------------|--------------|------------|--------|-----------|--------|------------|
| SLiM-domain interfaces | | | | | | | | | |
| side | 1 | 21 | 23 | 7 | 209 | 0.33 | 0.42 | 0.14 | 70 |
| side | 2 | 17 | 19 | 6 | 166 | 0.32 | 0.42 | 0.14 | 70 |
| side | 3 | 9 | 14 | 4 | 118 | 0.27 | 0.41 | 0.11 | 64 |
| side | 4 | 5 | 9 | 2 | 74 | 0.23 | 0.42 | 0.10 | 59 |
| side | 5 | 3 | 5 | 1 | 42 | 0.25 | 0.41 | 0.11 | 53 |
| any | 1 | 24 | 24 | 8 | 231 | 0.33 | 0.39 | 0.14 | 69 |
| any | 2 | 21 | 23 | 7 | 209 | 0.33 | 0.40 | 0.14 | 70 |
| any | 3 | 18 | 19 | 6 | 177 | 0.33 | 0.40 | 0.14 | 69 |
| any | 4 | 11 | 11 | 4 | 136 | 0.26 | 0.40 | 0.11 | 64 |
| any | 5 | 6 | 15 | 2 | 93 | 0.24 | 0.39 | 0.11 | 59 |
| Domain-domain interfaces | | | | | | | | | |
| side | 1 | 16 | 36 | 6 | 143 | 0.19 | 0.42 | 0.13 | 70 |
| side | 2 | 12 | 32 | 5 | 118 | 0.18 | 0.44 | 0.12 | 69 |
| side | 3 | 8 | 24 | 4 | 86 | 0.16 | 0.46 | 0.11 | 64 |
| side | 4 | 5 | 16 | 2 | 56 | 0.14 | 0.45 | 0.10 | 58 |
| side | 5 | 3 | 9 | 1 | 32 | 0.15 | 0.46 | 0.11 | 58 |
| any | 1 | 18 | 39 | 7 | 159 | 0.18 | 0.40 | 0.13 | 70 |
| any | 2 | 17 | 37 | 7 | 146 | 0.20 | 0.43 | 0.13 | 71 |
| any | 3 | 13 | 33 | 6 | 125 | 0.18 | 0.44 | 0.12 | 68 |
| any | 4 | 9 | 27 | 4 | 99 | 0.16 | 0.46 | 0.11 | 66 |

| | | | | | | | | | |
|-----|---|---|----|---|----|------|------|------|----|
| any | 5 | 6 | 20 | 3 | 70 | 0.13 | 0.43 | 0.10 | 57 |
|-----|---|---|----|---|----|------|------|------|----|