**Table S1 – setups tested for training in the second layer networks.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Setup | pssm | sec-rsa | β-turn-G | β-turn-P |
| A | X | X |  |  |
| B | X | X | X |  |
| C | X |  | X |  |
| D | X |  |  | X |
| E |  |  |  | X |
| F |  | X | X |  |
| G |  |  | X |  |
| H | X | X |  | X |
| I |  | X |  | X |
| J | X | X | X | X |
| K | X |  | X | X |
| L |  |  | X | X |
| M |  | X | X | X |