**Supplementary Table S1**: AUCs for each model using test set. Flank size is varied from 1 to 25.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Model AUCs | | |
| Flank size | MoRFwin | MoRFbi-1 | MoRFbi-2 |
| 1 | 0.63 | 0.624 | 0.579 |
| 2 | 0.628 | 0.634 | 0.59 |
| 3 | 0.639 | 0.692 | 0.421 |
| 4 | 0.654 | 0.613 | 0.608 |
| 5 | 0.666 | 0.72 | 0.5 |
| 6 | 0.666 | 0.71 | 0.625 |
| 7 | 0.681 | 0.704 | 0.631 |
| 8 | 0.692 | 0.72 | 0.636 |
| 9 | 0.7 | 0.701 | 0.641 |
| 10 | 0.709 | 0.698 | 0.646 |
| 11 | 0.715 | 0.737 | 0.652 |
| 12 | 0.718 | 0.732 | 0.655 |
| 13 | 0.724 | 0.727 | 0.658 |
| 14 | 0.729 | 0.741 | 0.661 |
| 15 | 0.734 | 0.741 | 0.663 |
| 16 | 0.737 | 0.743 | 0.665 |
| 17 | 0.74 | 0.743 | 0.667 |
| 18 | 0.743 | 0.744 | 0.669 |
| 19 | 0.746 | 0.744 | 0.67 |
| **20** | **0.748** | **0.745** | **0.672** |
| **21** | **0.749** | **0.745** | **0.672** |
| **22** | **0.749** | **0.745** | **0.673** |
| **23** | **0.75** | **0.747** | **0.674** |
| **24** | **0.751** | **0.749** | **0.675** |
| **25** | **0.751** | **0.747** | **0.675** |

To select the best flank size, we varied the flank size from 1 to 25. For flank size 20 and above, best AUCs are obtained. However, as flank size increases from 20 by step size of 1, there is increment in AUC for a value of 0.001 only. Therefore, we select flank size to be 20 for all the models.