Table 1

Influence of negative examples during AFP prediction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Dataset** | **λ** | **MCC** | **Accuracy (%)** | **Sensitivity (%)** | **Specificity (%)** |
| 300 AFPs and 300 non-AFPsa | 05 | 0.797 (0.0035) | 89.61 (0.344) | 88.45 (1.072) | 91.00 (0.670) |
| 10 | 0.800 (0.0095) | 89.69 (0.706) | 88.89 (1.835) | 91.00 (0.330) |
| 15 | 0.796 (0.0148) | 89.61 (0.919) | 89.22 (1.575) | 90.52 (0.790) |
| 20 | 0.786 (0.0078) | 89.17 (0.440) | 88.89 (1.018) | 90.33 (0.665) |
| 300 AFPs and 900 non-AFPs | 05 | 0.755 | 90.92 | 78.67 | 96.0 |
| 10 | 0.762 | 91.25 | 77.67 | 96.78 |
| 15 | 0.775 | 91.83 | 76.67 | 97.11 |
| 20 | 0.773 | 91.83 | 77.33 | 97.22 |

aFormat: Average evaluation parameter (Standard deviation) upon random selection of negative examples three times.

Table 2

Performance of AFP-PseAAC compared with AFP-Pred [5] and iAFP [14] on independent test dataset

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Predictor | Accuracy (%) | Sensitivity (%) | Specificity (%) | Youden's Indexa |
| AFP-PseAAC | 84.75  | 86.19  | 84.72  | 0.71 |
| AFP-Pred | 69.86  | 78.45 | 69.67 | 0.48 |
| iAFP | 95.46 | 7.18 | 97.38 | 0.05 |

aYouden’s Index [20] = Sensitivity + Specificity - 1