

**Table S1.** Prediction results of the SVM and RF classifiers based on different features with the cut-off of 0.4.

Method	Feature	Acc	Sen	Spe	Pre	F-score	MCC	AUC
score								
SVM	PSSM_AAC (20D)	0.907	0.849	0.936	0.869	0.859	0.789	0.927
	PSPCP_ACC (1000D)	0.827	0.714	0.883	0.754	0.734	0.606	0.868
	PSFM_DWT (1040D)	0.904	0.849	0.932	0.863	0.856	0.785	0.927
	PSSM_EDT (1600D)	0.916	0.852	0.949	0.893	0.872	0.811	0.942
	All features (3660D)	0.914	0.865	0.939	0.877	0.871	0.807	0.935
RF	PSSM_AAC (20D)	0.901	0.845	0.929	0.857	0.851	0.777	0.932
	PSPCP_ACC (1000D)	0.781	0.695	0.824	0.664	0.679	0.514	0.833
	PSFM_DWT (1040D)	0.895	0.849	0.918	0.838	0.843	0.764	0.923
	PSSM_EDT (1600D)	0.902	0.852	0.927	0.855	0.853	0.780	0.940
	All features (3660D)	0.900	0.845	0.927	0.854	0.850	0.775	0.936

**Table S2.** Performance comparison before and after feature selection with the cut-off of 0.4.

Dataset	Feature	Acc	Sen	Spe	Pre	F-score	MCC
Train-915	All features (3660D)	0.914	0.865	0.939	0.877	0.871	0.807
	Optimal subset (320D)	0.918	0.852	0.950	0.896	0.873	0.813
Train-1502	All features (3660D)	0.953	0.892	0.974	0.925	0.908	0.877
	Optimal subset (180D)	0.946	0.874	0.971	0.914	0.893	0.858