

Figure S1: The ROC curves and AUC values of ABP(a), AFP(b), AHP(c), AVP(d), and ACP(e) prediction.

Table S1: Results of single domain transfer for ACP prediction

	ACC	PRE	REC	$F_1$	MCC
ANN-ACP	96.14 $\pm$ 1.62	97.18 $\pm$ 1.69	97.45 $\pm$ 1.12	90.48 $\pm$ 4.06	97.31 $\pm$ 1.12
<b>ABP-&gt;ACP</b>	96.84 $\pm$ 1.54	97.57 $\pm$ 1.62	98.01 $\pm$ 1.00	92.22 $\pm$ 3.85	97.80 $\pm$ 1.07
<b>ABP*-&gt;ACP</b>	96.59 $\pm$ 1.15	97.41 $\pm$ 1.18	97.86 $\pm$ 1.04	91.59 $\pm$ 2.93	97.63 $\pm$ 0.79
<b>AFP-&gt;ACP</b>	96.68 $\pm$ 1.68	97.76 $\pm$ 1.73	97.63 $\pm$ 1.17	91.81 $\pm$ 4.20	97.69 $\pm$ 1.16
AHP->ACP	96.43 $\pm$ 1.24	97.34 $\pm$ 1.21	97.71 $\pm$ 1.08	91.14 $\pm$ 3.27	97.51 $\pm$ 0.84
AVP->ACP	96.51 $\pm$ 1.25	97.06 $\pm$ 1.15	98.09 $\pm$ 1.22	91.39 $\pm$ 3.42	97.57 $\pm$ 0.83

\* downsampling of ABP.

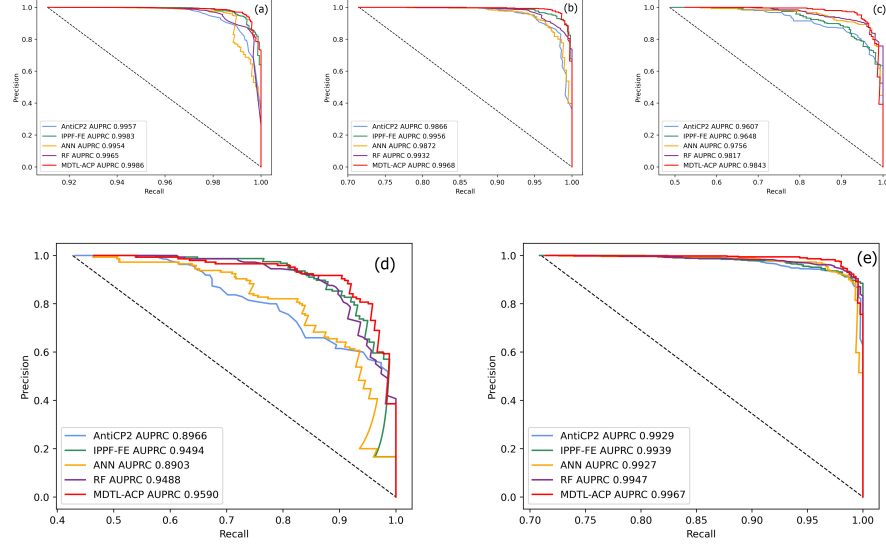


Figure S2: The PR(precision-recall) curves and AUPR values of ABP(a), AFP(b), AHP(c), AVP(d), and ACP(e) prediction.

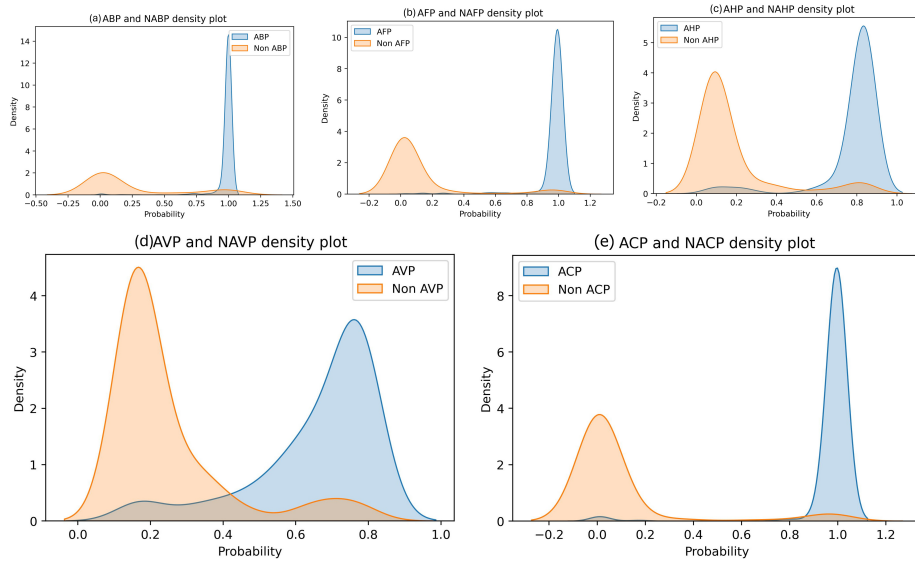


Figure S3: The probability density of prediction task in ABP(a), AFP(b), AHP(c), AVP(d), and ACP(e).