Figure 3: The effect of the mixture parameter $\gamma$ on the performance. Performance is measured by the number of true relations that are detected before the first false positive (see section ?? for more details). (a) Exploring $\gamma$ in the range $[0, 1]$ using profss with true secondary structure information. (b) Magnification of the range 0-0.15. The peak is obtained at $\gamma = 0.055$. Approximately the same value is obtained when using profss with PSIPRED predicted secondary structure information and also when using predicted information after the probabilities were rounded such that the most probable state is assigned the probability of 1 and the other two states are assigned probability of 0.

Figure 4: Distribution of profile similarity scores. (a) The uniform approach: the scores follow the EVD distribution (with $\lambda = 0.707$ and $u = 4.77$). (b) The normalized length-corrected scores (zscores) also follow the EVD (zscores are shifted and multiplied by 10 to emulate typical values for raw similarity scores).