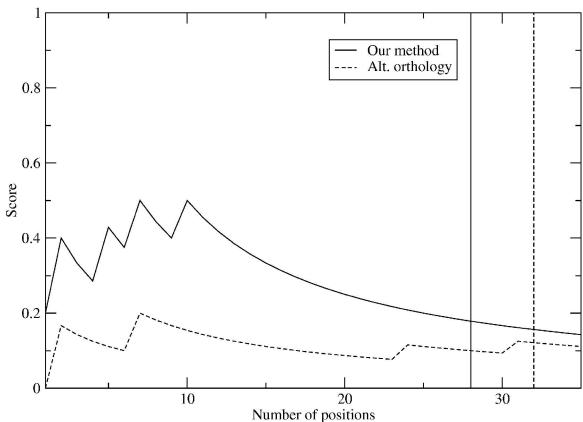
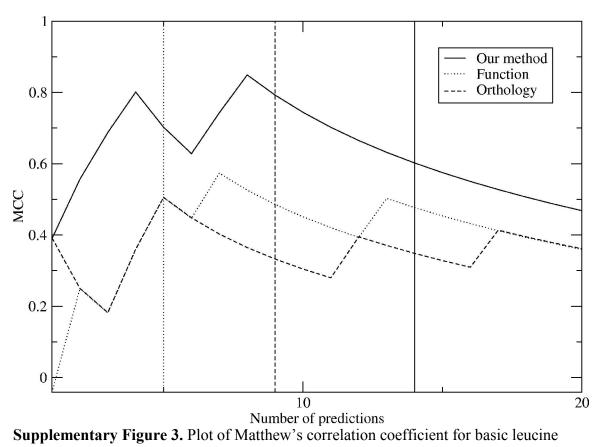


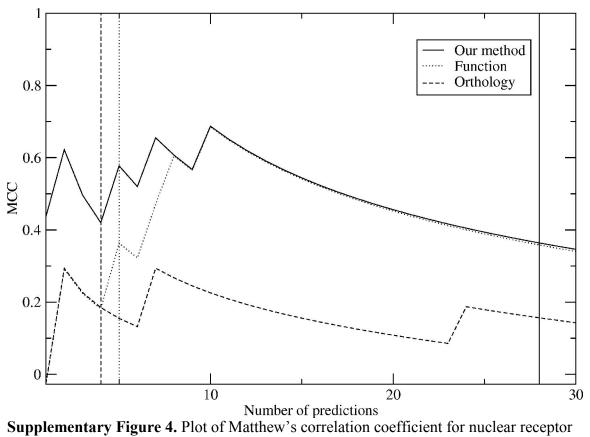
Supplementary Figure 1. Plot of score versus the number of predictions considered for our method and the alternative orthology method. The vertical lines represent the number of the last prediction with a z-score above 3.0.



Number of positions **Supplementary Figure 2.** Plot of score versus the number of predictions considered for our method and the alternative orthology method. The vertical lines represent the number of the last prediction with a z-score above 3.0.



Supplementary Figure 3. Plot of Matthew's correlation coefficient for basic leucine zipper DNA base specificity-determining residues versus the number of predictions considered. The vertical lines represent the number of the last prediction with a z-score above 3.0.



Supplementary Figure 4. Plot of Matthew's correlation coefficient for nuclear receptor DNA base specificity-determining residues versus the number of predictions considered. The vertical lines represent the number of the last prediction with a z-score above 3.0.