



**Supplementary Figure 2.** Pairwise HMM logos (Schuster-Bockler and Bateman, 2005) of protein families known (PF01930, PF01939, PF08378 and PF10356) or predicted (PF03008, PF09002, PF09903 and PF10117) to be members of the PD-(D/E)xK clan (CL0236) from Pfam 23.0 (Finn *et al.*, 2008). **(A)** PF01939 and PF03008; **(B)** PF01930 and PF10117; **(C)** PF08378 and PF09002; **(D)** PF09903 and PF10356 (split in two parts for clarity). Notice functionally important acidic residues and conserved lysine (Aravind *et al.*, 2000).