



**Figure 3.** PRMT family. (A) Reactions catalyzed by the two major types of protein arginine methylation. (B) Representatives of PRMT members (type I: PRMT1 and PRMT4; type II: PRMT5). The conserved methyltransferase (MTase) domain is in green and the unique  $\beta$ -barrel domain in yellow. (C) Dimeric structures of PRMT1 (PDB 1OR8) and PRMT4 (PDB 3B3F). Dimerization arms are indicated by red circles. (D) Type II PRMT5-MEP50 tetramer complex (DPB 4GQB), formed by the stacking of two dimers. The second dimer is faded in the background. MEP50 (colored in brown) interacts with the amino-terminal domain (gray) of PRMT5. Bound H4 peptide is colored in red. (E) An example of three coactivators acting synergistically for p53-mediated transcription.