



Figure 3. Structure of Class I and II HDACs. Crystal structures of the arginase/deacetylase superfamily of proteins are illustrated. Metal ions are represented as space filled spheres: red, gray, and violet spheres indicate Mn, Zn, and K atoms, respectively. (A) *Aquifex aeolicus* HDLP (1C3P), (B) rat arginase (PDB ID: 1RLA), (C) human Class I HDAC3 (4A69) in complex with Ins(1,4,5,6)P₄ (highlighted by magenta space-filled spheres) and the deacetylase activation domain from the human SMRT corepressor (depicted with a ribbon model in black), (D) human Class I HDAC8 (3F07), (E) human Class IIa HDAC4 (2VQW), and (F) human Class IIa HDAC7 (3C0Y).