



Figure 3. Structures of BAH domains of mammalian ORC1 and plant ZMET2 bound to methylated lysine histone peptides. (A) 1.95-Å crystal structure of the complex of mouse ORC1 BAH domain bound to H4(14-25)K20me2 peptide (PDB: 4DOW). The bound K20me2-containing H4 peptide can be traced from G14 to R23. (B) Enlargement of (A) showing details of the alignment of the K20me2-containing H4 peptide from G14 to R23 positioned on the mouse ORC1 BAH domain in the complex. The dimethylammonium group of H4K20 inserts into an aromatic-lined pocket in the BAH domain. (C) 2.7-Å crystal structure of the complex of maize ZMET2 BAH domain bound to H3(1-32)K9me2 peptide (PDB: 4FT4). The chromodomain, methyltransferase, and BAH domains are colored in pink, blue, and green, respectively. The bound K9me2-containing H3 peptide in yellow can be traced from Q5 to T11. (D) Enlargement showing details of the alignment of the K9me2-containing H3 peptide from Q5 to T11 positioned on the maize ZMET2 BAH domain in the complex. The dimethylammonium group of H3K9me2 inserts into an aromatic-lined pocket in the BAH domain.