



Figure 7. Histone-modifying enzymes. Covalent histone modifications are transduced by histone-modifying enzymes (“writers”) and removed by antagonizing activities (“erasers”). They are classified into families according to the type of enzymatic action (e.g., acetylation, phosphorylation, or methylation). Protein domains with specific affinity for a histone tail modification are termed “readers.” HAT, histone acetyltransferase; PRMT, protein arginine methyltransferase; KMT, lysine methyltransferase; HDAC, histone deacetylase; PPTase, protein phosphatase; PAD, peptidylarginine deiminase; KDM, lysine demethylase; Ac, acetylation; P, phosphorylation; Me, methylation.