



Figure 10. Histone-modifying Enzymes

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