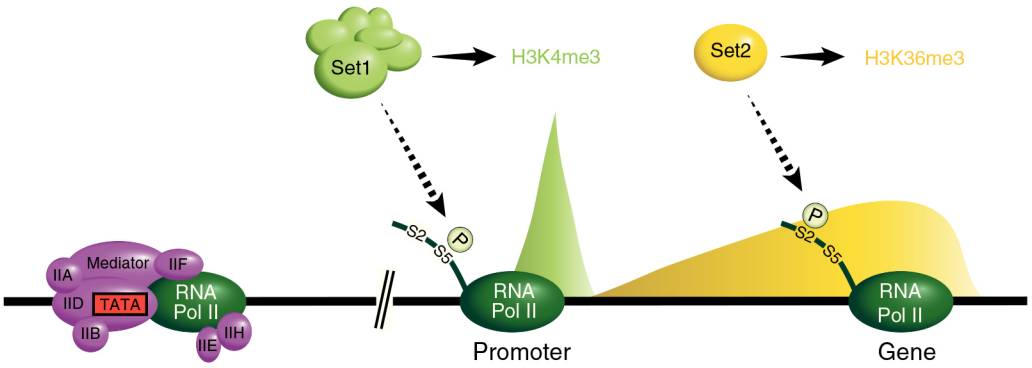

Figure 14. Modifications of the carboxy-terminal domain (CTD) of RNA Pol II. Unmodified RNA Pol II is recruited to promoters via the interaction with general transcription factors (purple). Serine 5 (S5) phosphorylation of the CTD initiates transcription, whereas serine 2 (S2) phosphorylation allows promoter clearance and, subsequently, transcriptional elongation. Importantly, these differential phosphorylation states of the CTD also mediate the recruitment of distinct chromatin-modifying enzymes: H3K4me3-specific KMT complexes (e.g., Set1) at promoters and an H3K36me3-specific KMT (Set2) over gene bodies.