Sin3p is involved modifying chromatin structure through its interactions with the Rpd3p histone deacetylase complex, DNA-binding transcription factors, and other regulatory proteins. As a consequence, SIN3 is required for transcriptional regulation, the regulation of heterochromatin, and maintaining genome integrity.Sin3p is found in a large multi-subunit complex that contains Rpd3p, a histone deacetylase. The Sin3p-Rpd3p histone deactylase complex is targeted to specific promoters via additional interactions between Sin3p and DNA-binding transcription factors, such as Ume6p. Once recruited to the promoter, the Sin3p-Rpd3p histone deacetylase complex generates localized regions of histone deacetylation, which results in transcriptional repression. Although SIN3 and RPD3 have been implicated in positively regulating gene expression, the mechanism of transcriptional activation via hypo-acetylated histones is currently unknown. In addition to its role in transcriptional regulation, SIN3 is also required for silencing, maintaining telomere length, and repairing double-strand breaks.Sin3p contains four paired amphipathic alpha helicies, a histone deacetylase interaction domainbetween PAH3 and PAH4, and a highly conserved regionat the C-terminal end. These domains are important for its repressor function and highly conserved in most eukaryotes.