The FACTcomplex is a heterodimer consisting of Pob3p and Spt16p. Both subunits of the FACT complex are highly conserved, but in higher eukaryotes the Pob3p homolog contains an HMGB DNA binding motif that mediates chromatin binding, while in S. cerevisiae, chromatin association of the complex is mediated by the small HMG-box protein Nhp6. Although Pob3p, Spt16p, and Nhp6Ap/Nhp6Bp do not form a stable heterotrimer, the Nhp6 protein is necessary for activity of the FACT complex.The FACT complex interacts with nucleosomes in multiple ways, primarily via the DNA binding activity of Nhp6p, but additionally Pob3p and Spt16p both display histone binding activity. The complex is able to alter chromatin structure without the requirement for ATP hydrolysis, in a mechanism distinct from ATP-dependent chromatin remodeling. The alterations in chromatin have often been referred to as disassembly and reassembly, but recent work suggests that the process may involve a conformational change between tighter and looser nucleosomal structures rather than disintegration of the nucleosome, and is more accurately called nucleosome reorganization. FACT has been implicated in several processes that require the access of large enzyme complexes to DNA: transcription initiation, transcription elongation, and DNA replication. In RNA polymerase IItranscription initiation, the FACT complex increases chromatin accessibility to transcription factors within promoter regions. However, it does not seem to have a role in chromatin reassembly within promoters after transcription initiation. This is in contrast to its role in transcription elongation, where it is thought to reorganize nucleosomes before the passage of RNAP II, and also to restore them to their original state afterwards. The role of FACT in DNA replication has been less studied in yeast than in other organisms, but there is both genetic and physical evidence for the involvement of the FACT complex in DNA replication in S. cerevisiae.