## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Overview of T. brucei histone modifications

File Name: Supplementary Data 2

Description: Expression data after HAT1 or HAT2 depletion based on RNAseq

File Name: Supplementary Data 3

Description: Quantification of H2A.Z levels after HAT2 depletion based on western blots

File Name: Supplementary Data 4

Description: Quantification of RNA Pol levels after HAT1 depletion based on western blots

File Name: Supplementary Data 5

Description: ERCC spike in values based on RNA-seq

File Name: Supplementary Data 6

Description: Information on sequencing data used for the individual Figures

File Name: Supplementary Data 7

Description: Statistical analyses of changes in histone acetylation levels