

ATAC-seq identifies chromatin landscapes linked to the regulation of oxidative stress in the human fungal pathogen *Candida albicans*

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Running title: ATACing fungal chromatin

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Table S1: Nextera primers used for ATAC-seq library preparation

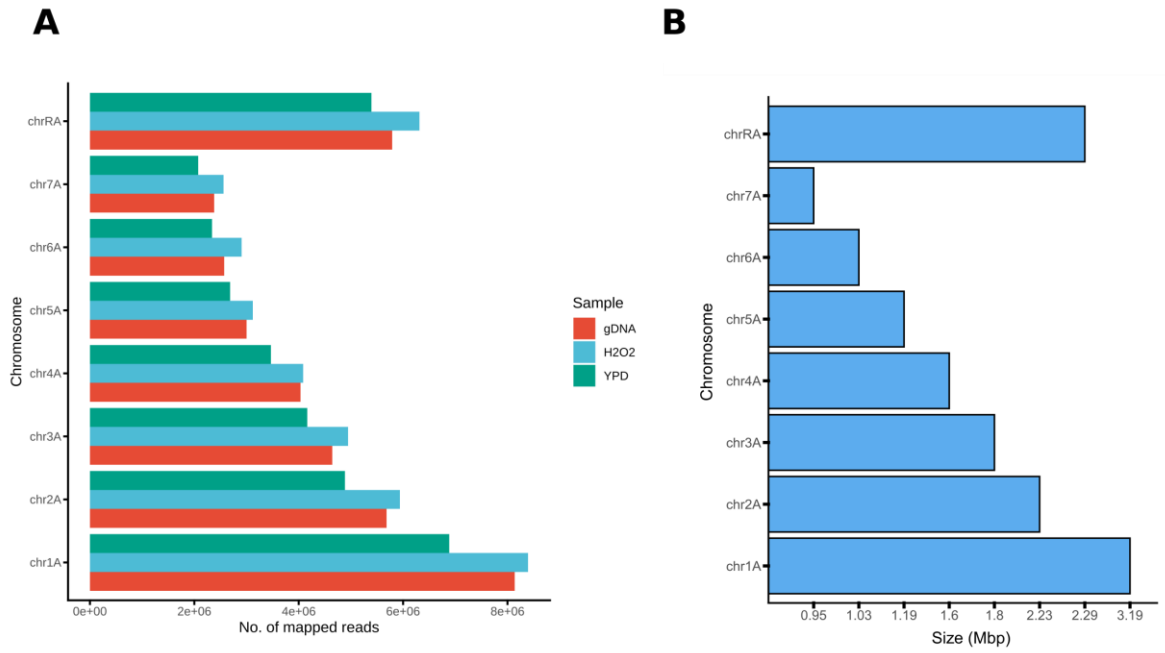
Table S2: K-means clustering result and transcriptional regulation of associated genes

Table S3: MACS2 peak calling and edgeR analysis result

Table S4: Merged ATAC-seq and RNA-seq result

Table S5: Peaks upstream of genes with altered chromatin accessibility upon oxidative stress without changes in gene expression

Figure S1



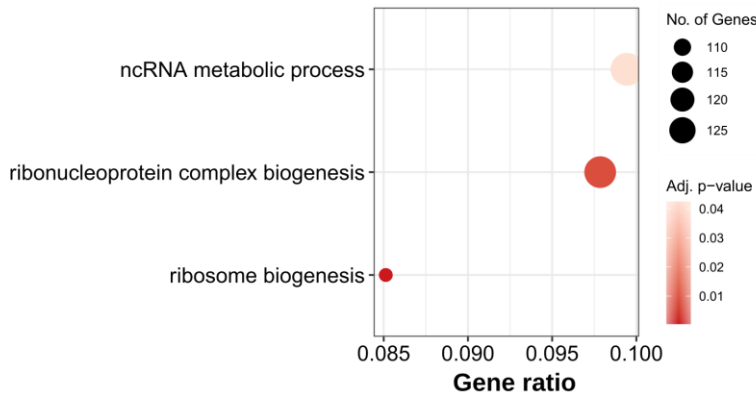
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Figure S1. Number of mapped ATAC-seq reads to each *C. albicans* chromosome.

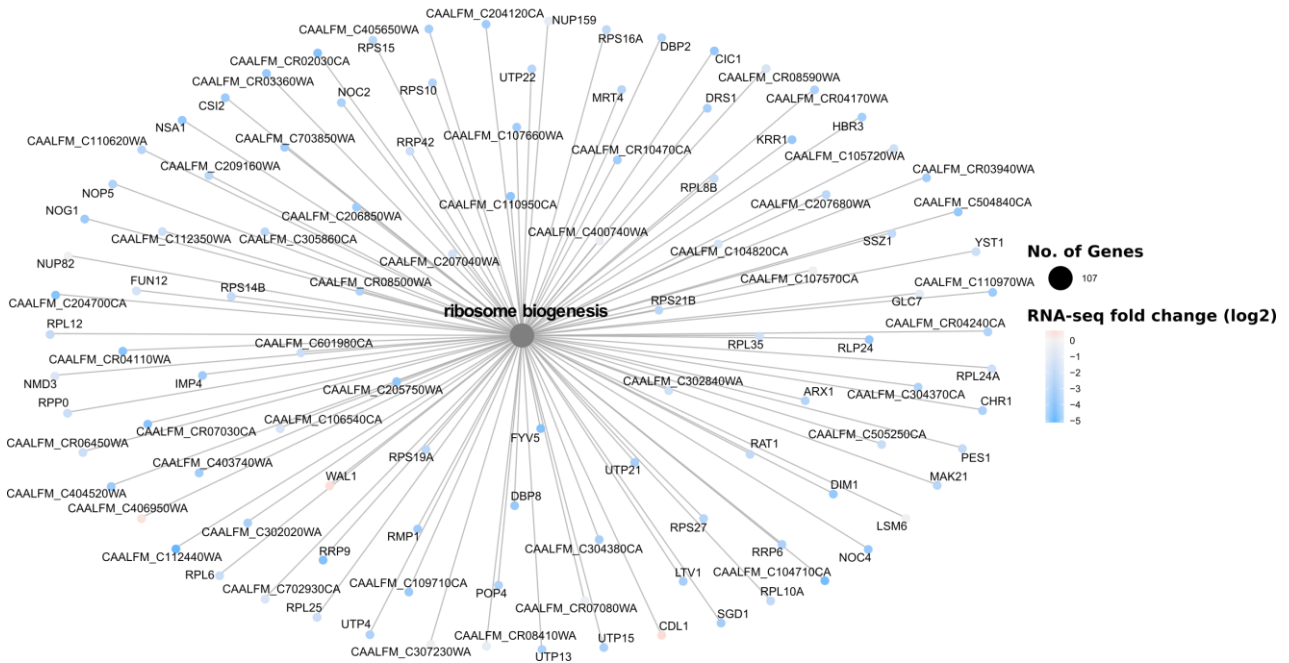
A-B) The aligned reads from each biological replicate of the gDNA, H₂O₂-treated (H₂O₂) and non-treated (YPD) ATAC-seq libraries were merged and the number of mapped reads (x-axis) per chromosome (y-axis) was plotted (A). As comparison, the total size (in Mbp) of each *C. albicans* chromosome is presented as well (B).

Figure S2

A



B



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59 **Figure S2. Analysis of genes with decreased chromatin accessibility in regions upstream their TSS.**

60 **A-B)** Genomic regions from cluster 4 (see Figure 2C-D) were annotated to the next downstream gene and

61 subjected to GO term enrichment analysis. Enriched biological processes are represented as dotplot (A) and

62 cnet plot for the biological process "ribosome biogenesis" (B). The cnet plot depicts the genes associated with

63 the presented GO term and the log2-fold change from RNA-seq data overlaid as color gradient. See figure

64 legend from Figure 2E for detailed description.

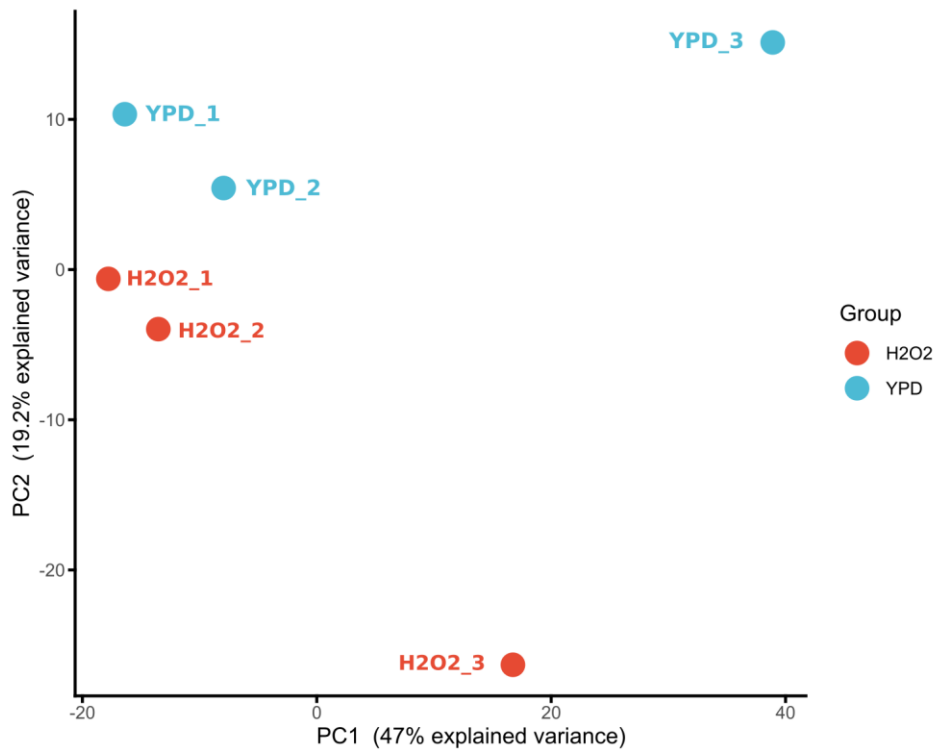
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Figure S3



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70 **Figure S3. PCA of detected nucleosome-free ATAC-seq peaks.**

71 Called nucleosome-free ATAC-seq peaks from all samples were merged and subjected to PCA based on the
72 presence or absence of ATAC-seq peaks in each replicate and condition (YPD and H₂O₂). Each dot in blue
73 represents three biological replicates from YPD-grown cells (YPD) and each dot in red represents three
74 biological replicates of H₂O₂-treated samples (H₂O₂). The x-axis shows the principal component 1 (PC1) and the
75 y-axis the principal component 2 (PC2).

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88 **Table S1. Nextera primers used for ATAC-seq library preparation.**

name	barcode	sequence (5' -> 3')
Ad1_noMX		AATGATACGGCGACCACCGAGATCTACACTCGTCGGCAGCGTCAGATGTG
Ad2.30_TTGCTAAG	TTGCTAAG	CAAGCAGAAGACGGCATAACGAGATCTTAGCAAGTCTCGTGGGCTCGGAGATGT
Ad2.31_ATAAGTTA	ATAAGTTA	CAAGCAGAAGACGGCATAACGAGATTAACCTTATGTCTCGTGGGCTCGGAGATGT
Ad2.32_ATCACTCG	ATCACTCG	CAAGCAGAAGACGGCATAACGAGATCGAGTGATGTCTCGTGGGCTCGGAGATGT
Ad2.33_GTTAACAG	GTTAACAG	CAAGCAGAAGACGGCATAACGAGATCTGTTAACGTCTCGTGGGCTCGGAGATGT
Ad2.38_GAAATGCC	GAAATGCC	CAAGCAGAAGACGGCATAACGAGATGGCATTTCGTCTCGTGGGCTCGGAGATGT
Ad2.39_AACGCCAT	AACGCCAT	CAAGCAGAAGACGGCATAACGAGATATGGCGTTGTCTCGTGGGCTCGGAGATGT

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