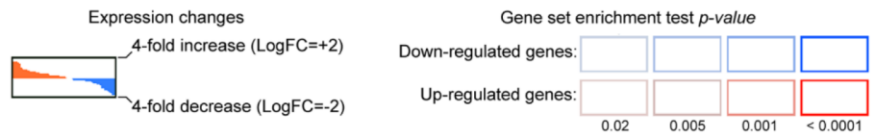
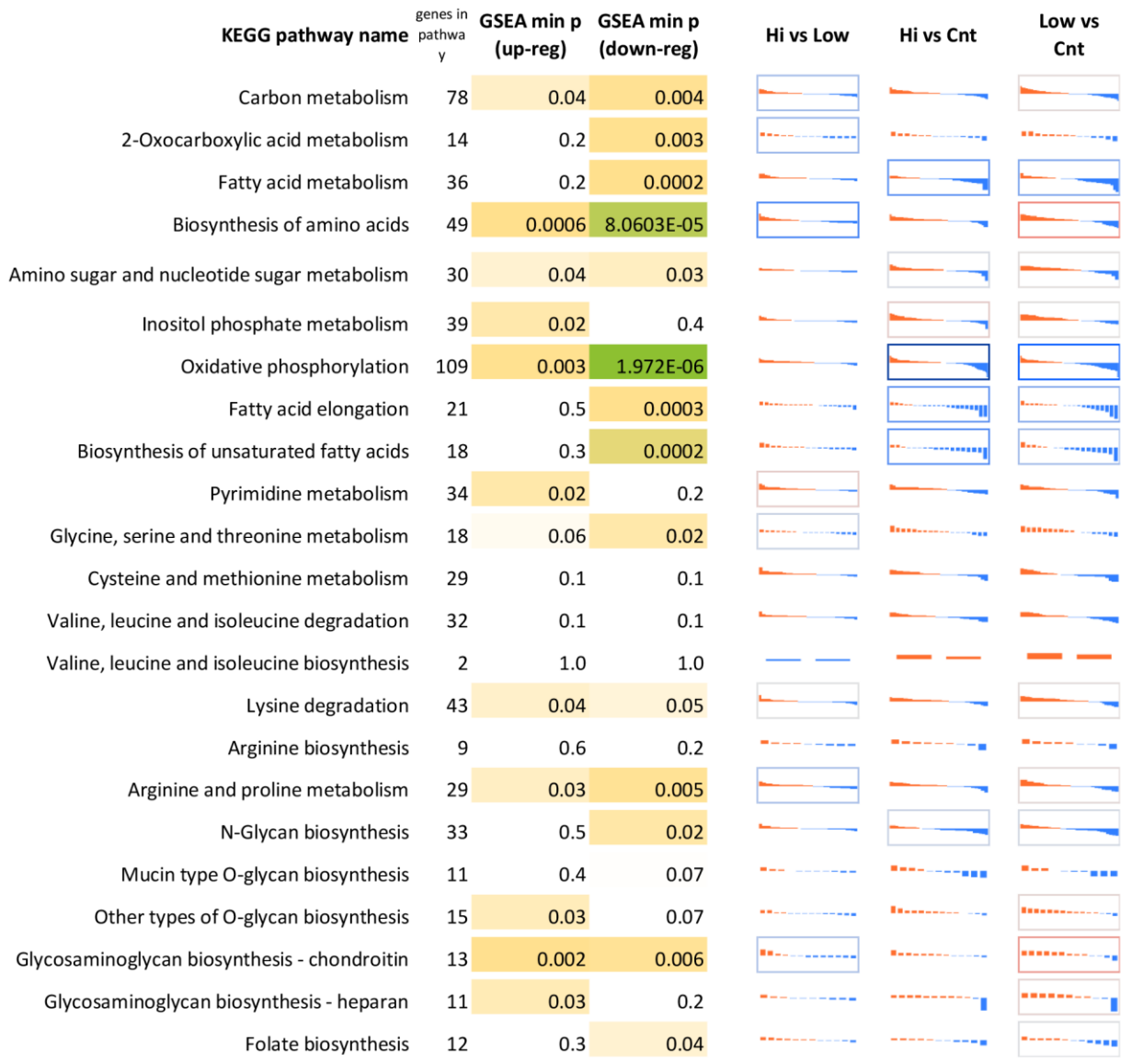
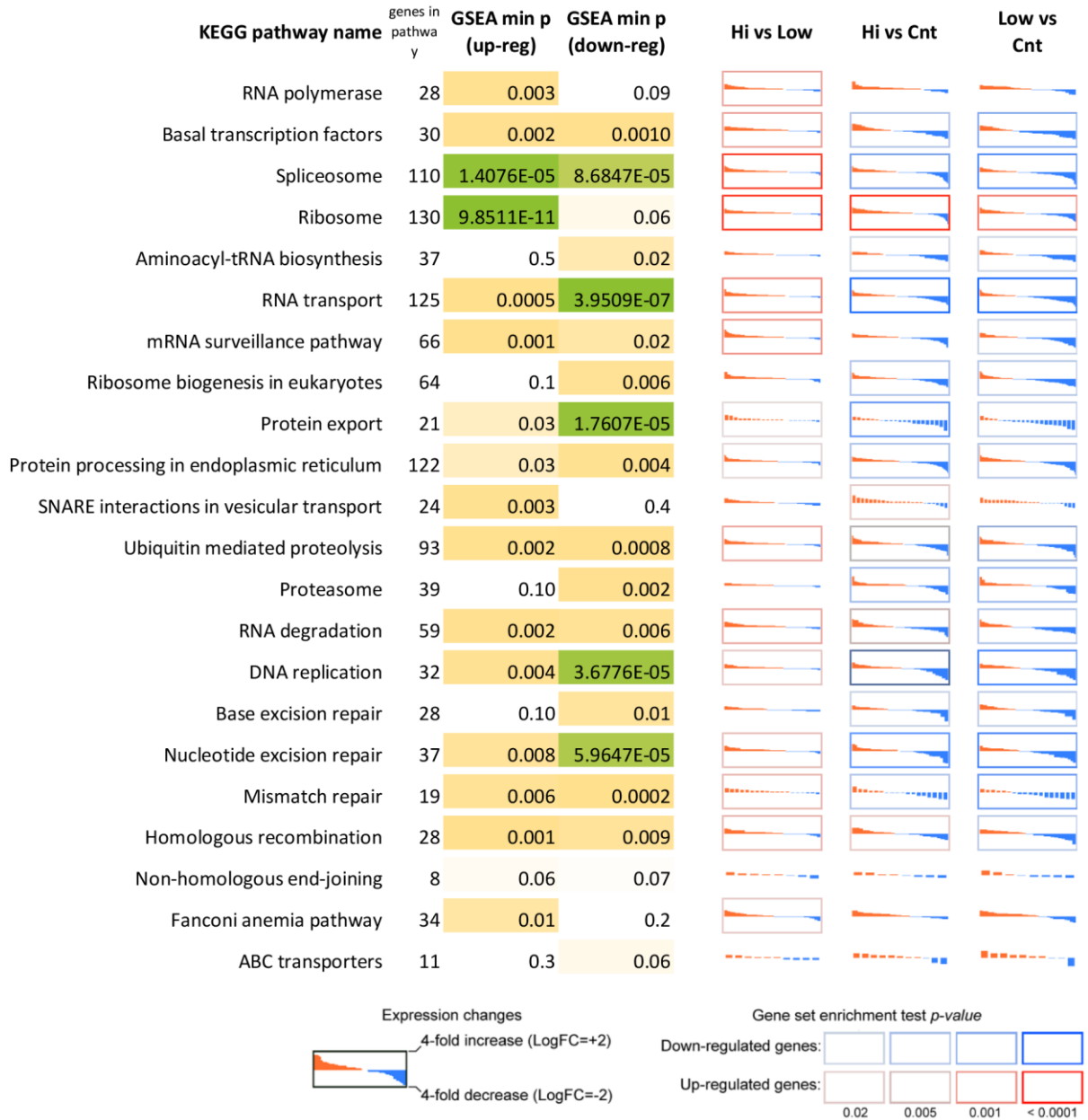


SUPPLEMENTARY FIGURES

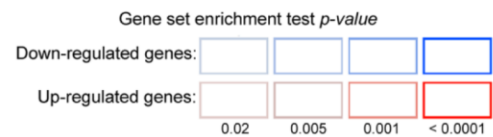
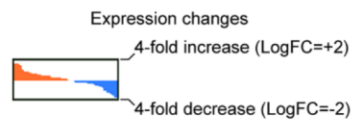
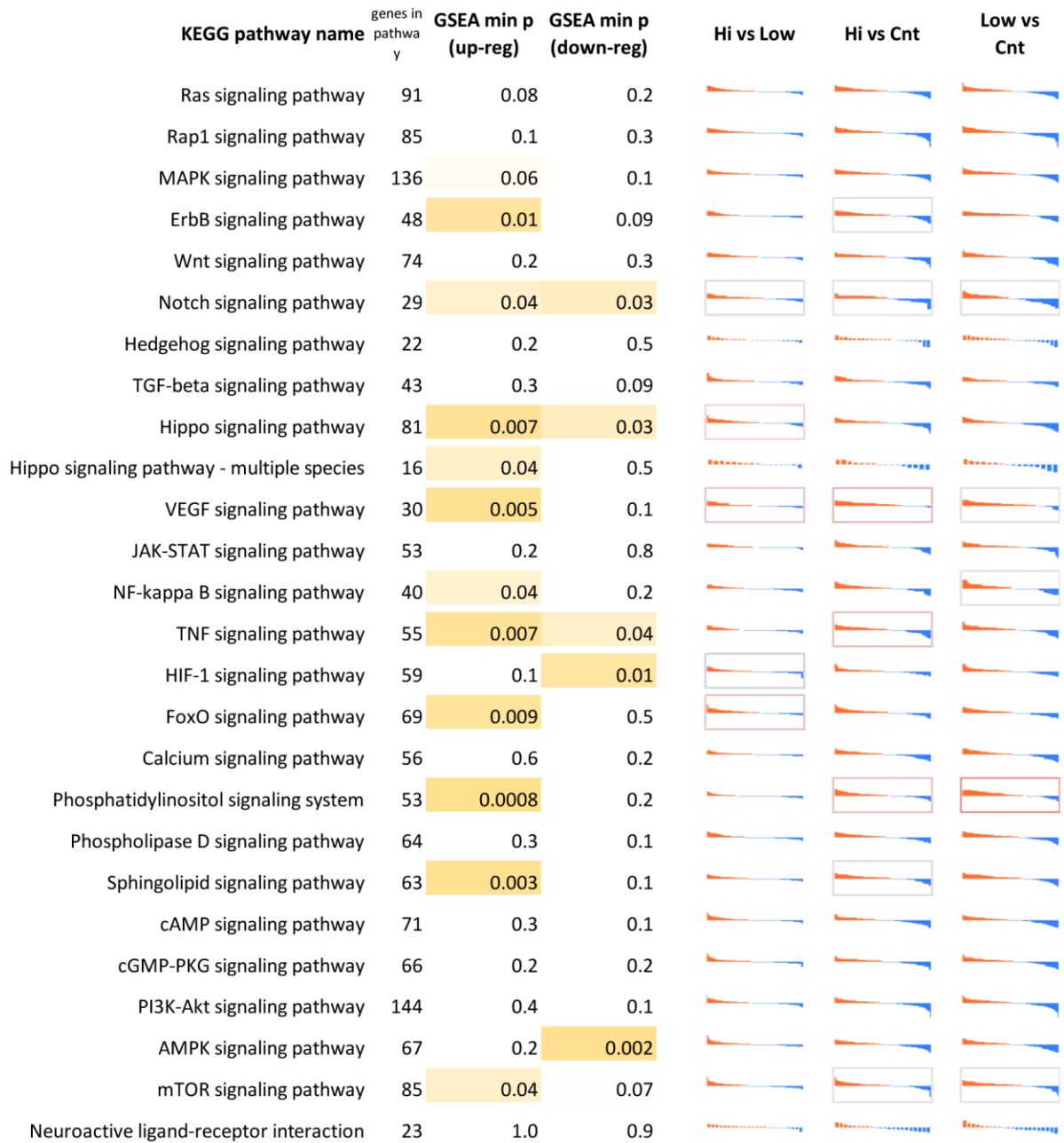
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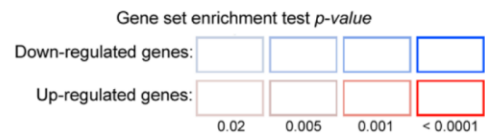
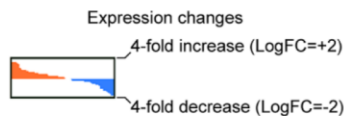
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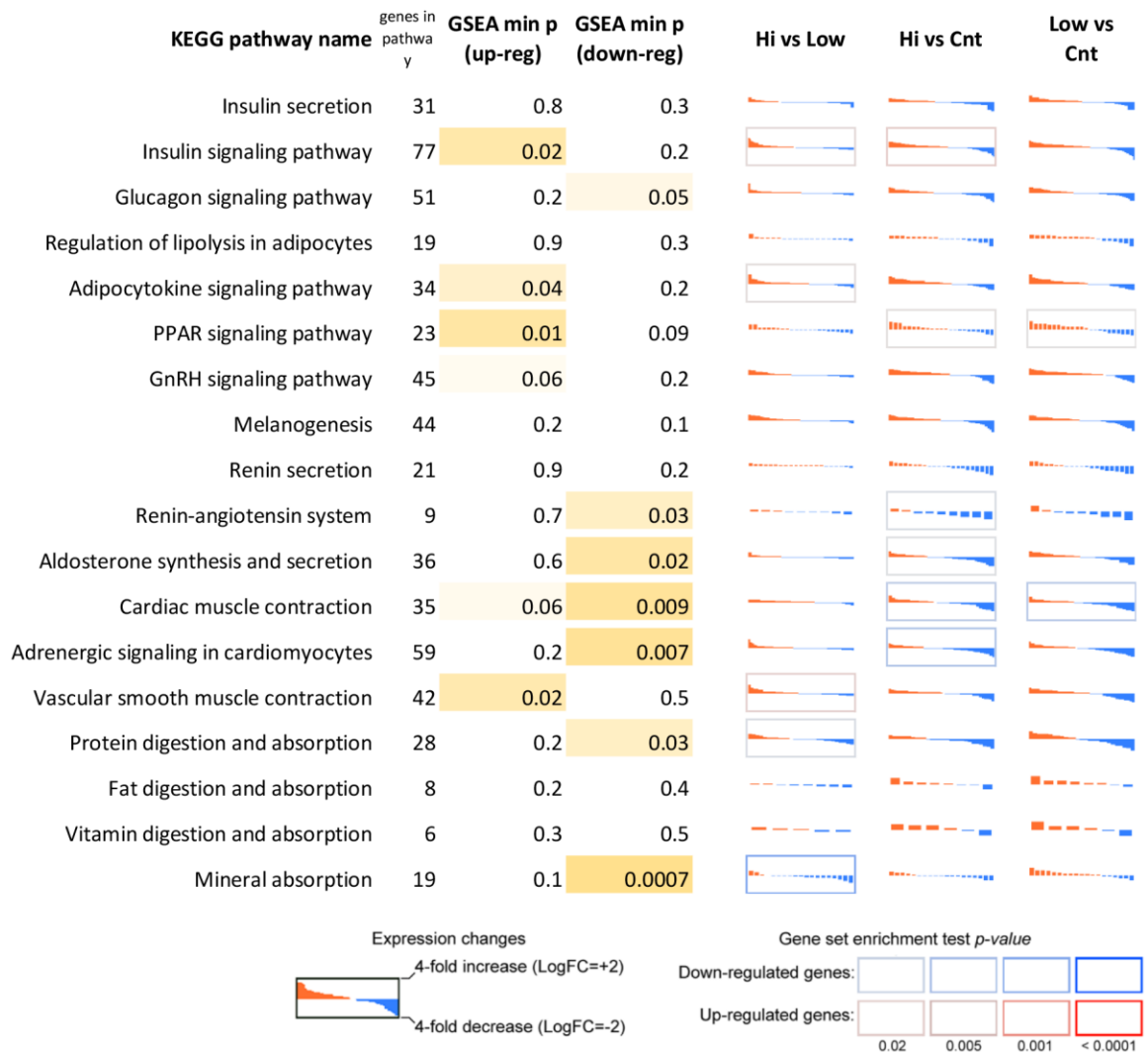
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D

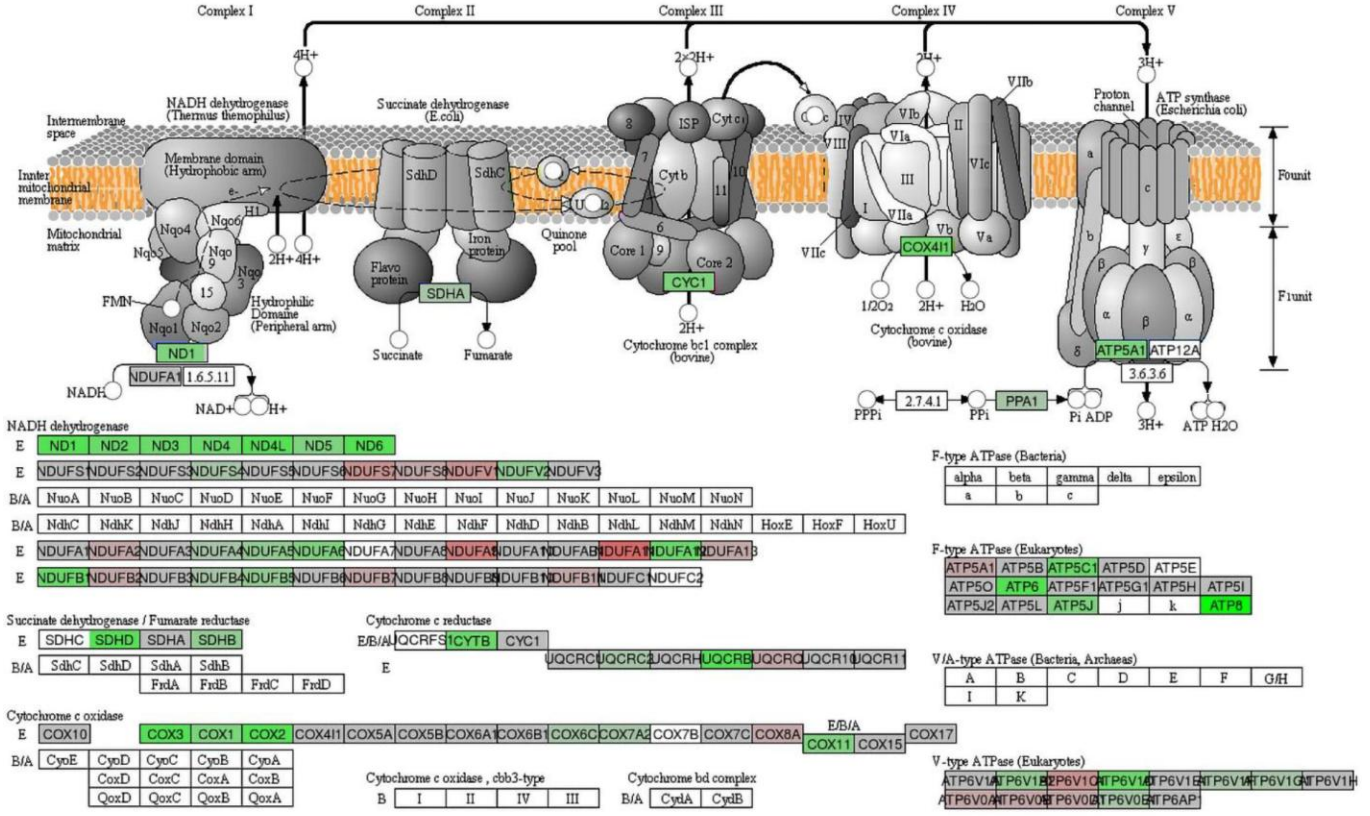


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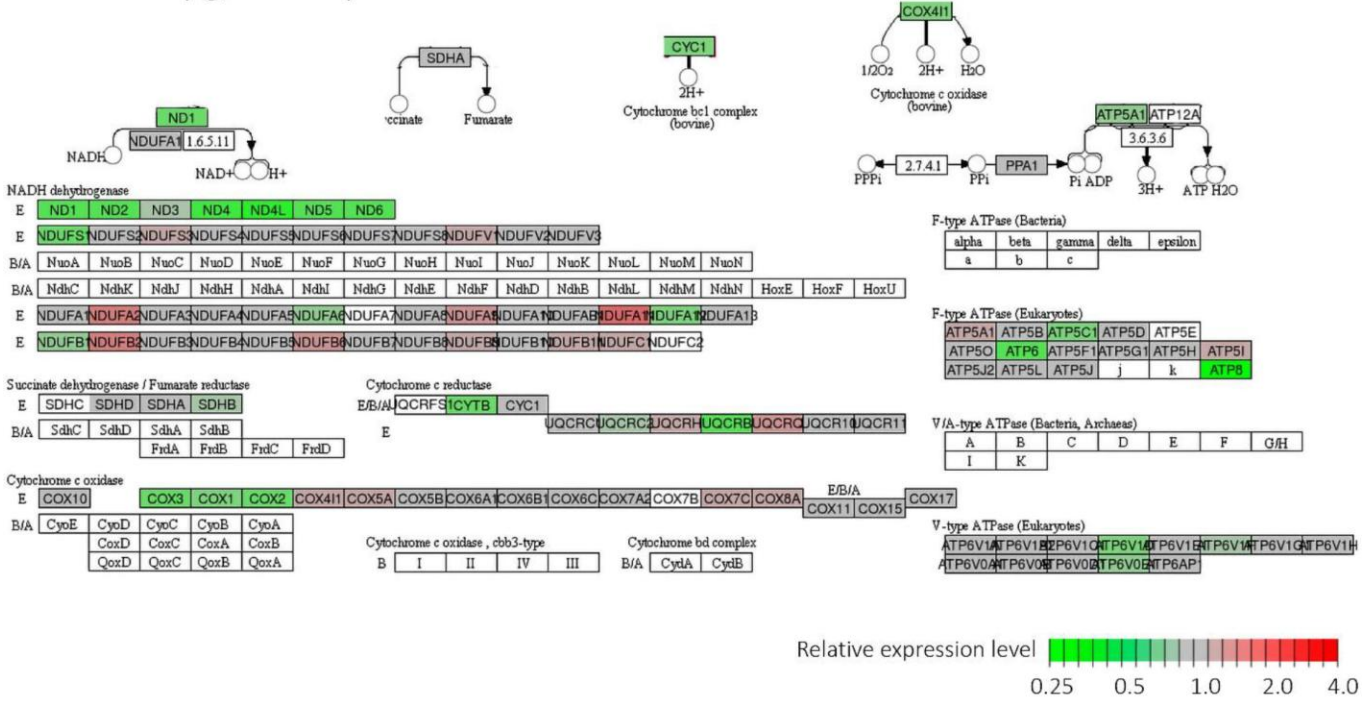


Supplementary Figure 1. Differential expression profiles of genes participating KEGG pathways according to the RNA-Seq data for MRC5-SV40 cell line treated with Abisil. On the figure, each cell demonstrates the sorted expression level log fold changes after Abisil treatment (red – upregulation, blue – downregulation) for genes participating a current KEGG pathway (vertical axis range is from 4-fold downregulation to 4-fold upregulation). Cell borders indicate whether a pathway is enriched with up- (red border) or downregulated (blue border) genes. *GSEA min p (up/down-reg)* – minimal p-value in a gene set enrichment analyses (GSEA; Fisher’s exact test) for the pathway. *Hi vs Low* – comparison of cells treated with 50 and 5 µg/ml; *Hi vs Cnt* – comparison of cells treated with Abisil 50 µg/ml and non-treated cells; *Low vs Cnt* – comparison of cells treated with Abisil 5 µg/ml and non-treated cells. (A) Cell metabolism. (B) Main cellular processes. (C) Cell signaling pathways. (D) Immune response pathways, cell cycle, apoptosis, autophagy. (E) Miscellaneous pathways.

A Abisil 5 µg/ml compared to non-treated cells

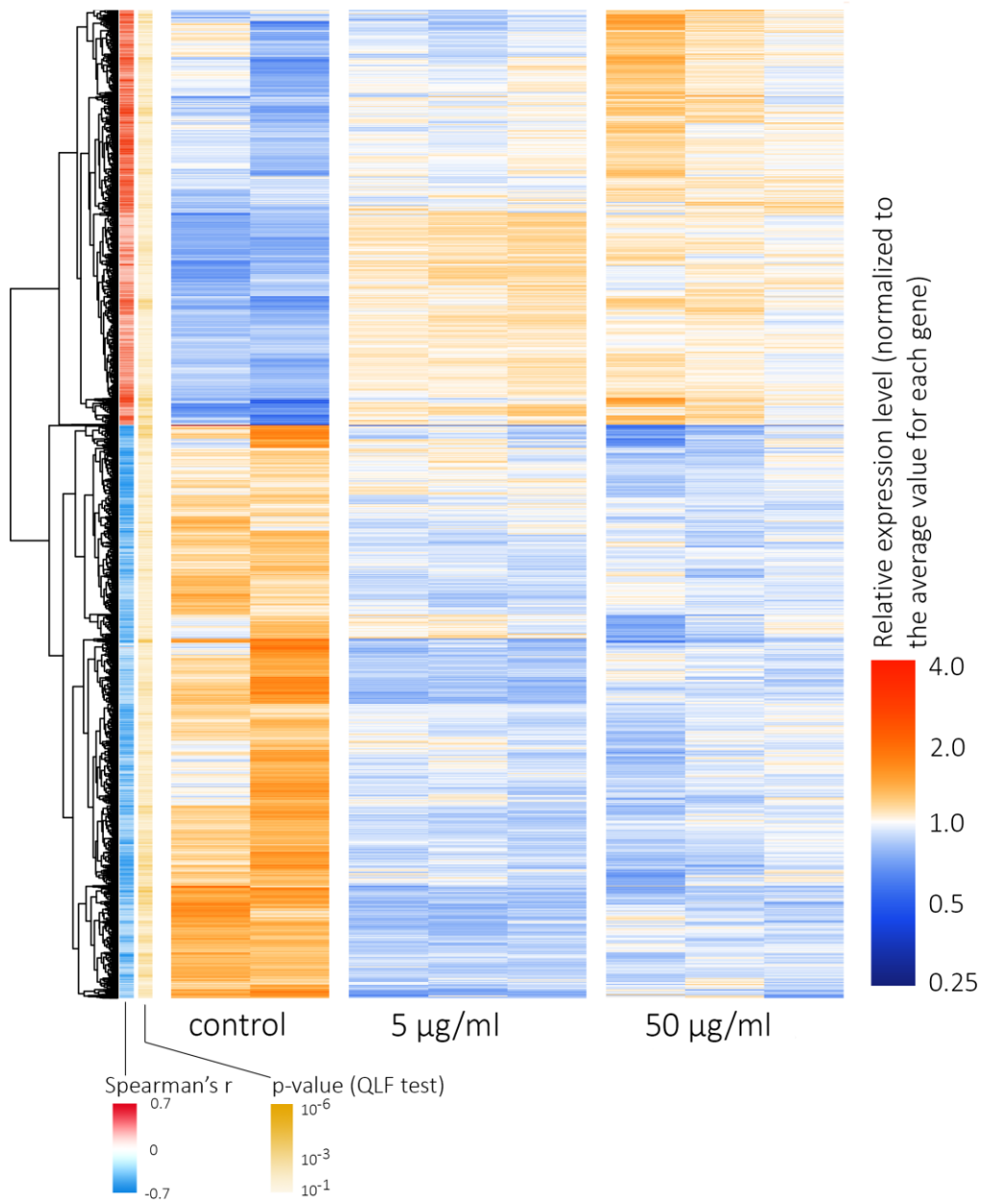


B Abisil 50 µg/ml compared to non-treated cells

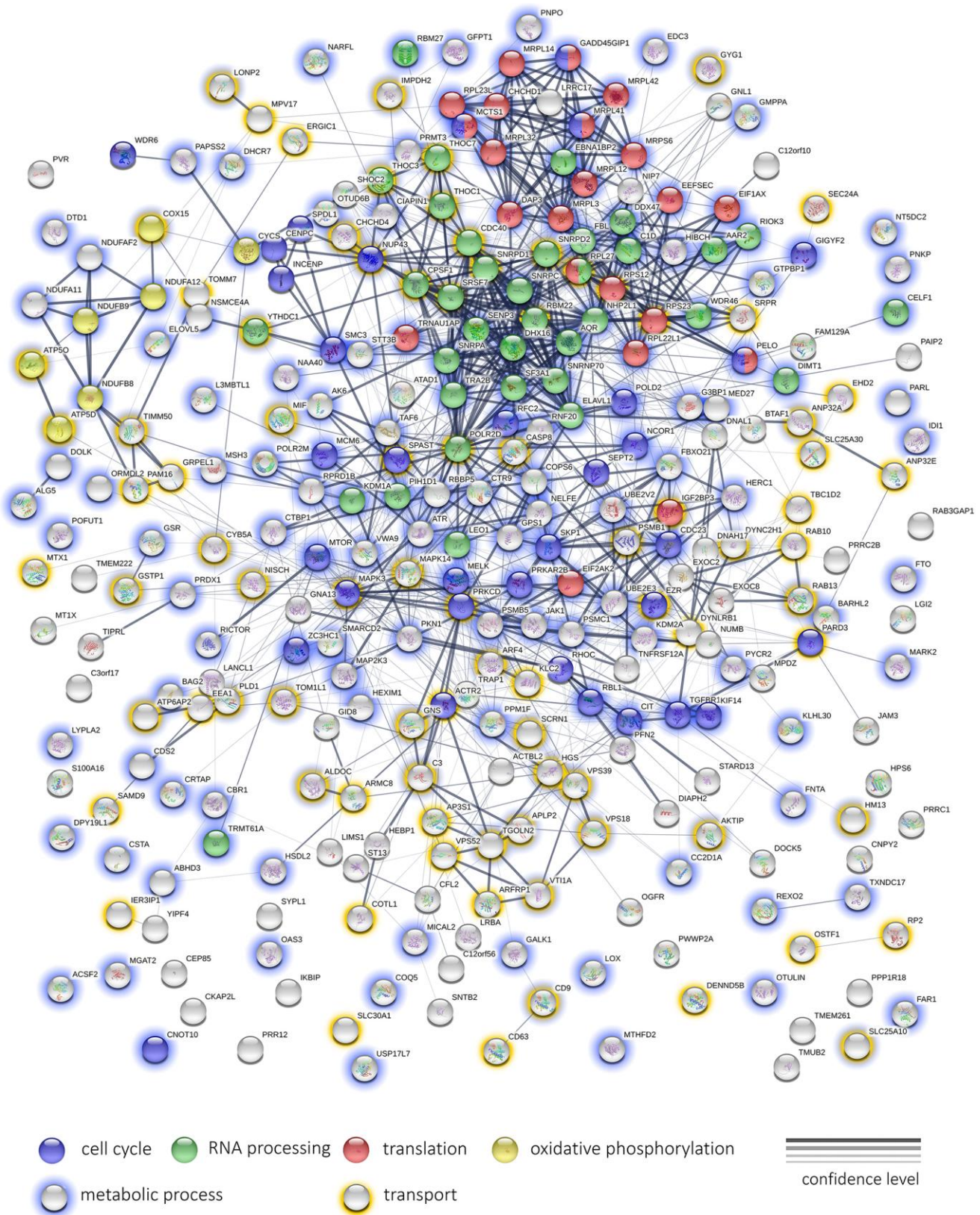


Supplementary Figure 2. Diagram illustrating expression changes of genes participating oxidative phosphorylation pathway (KEGG) introduced by Abisil treatment (MRC5-SV40 cell line): 5 µg/ml (A) and 50 µg/ml (B). Green – downregulation, red – upregulation.

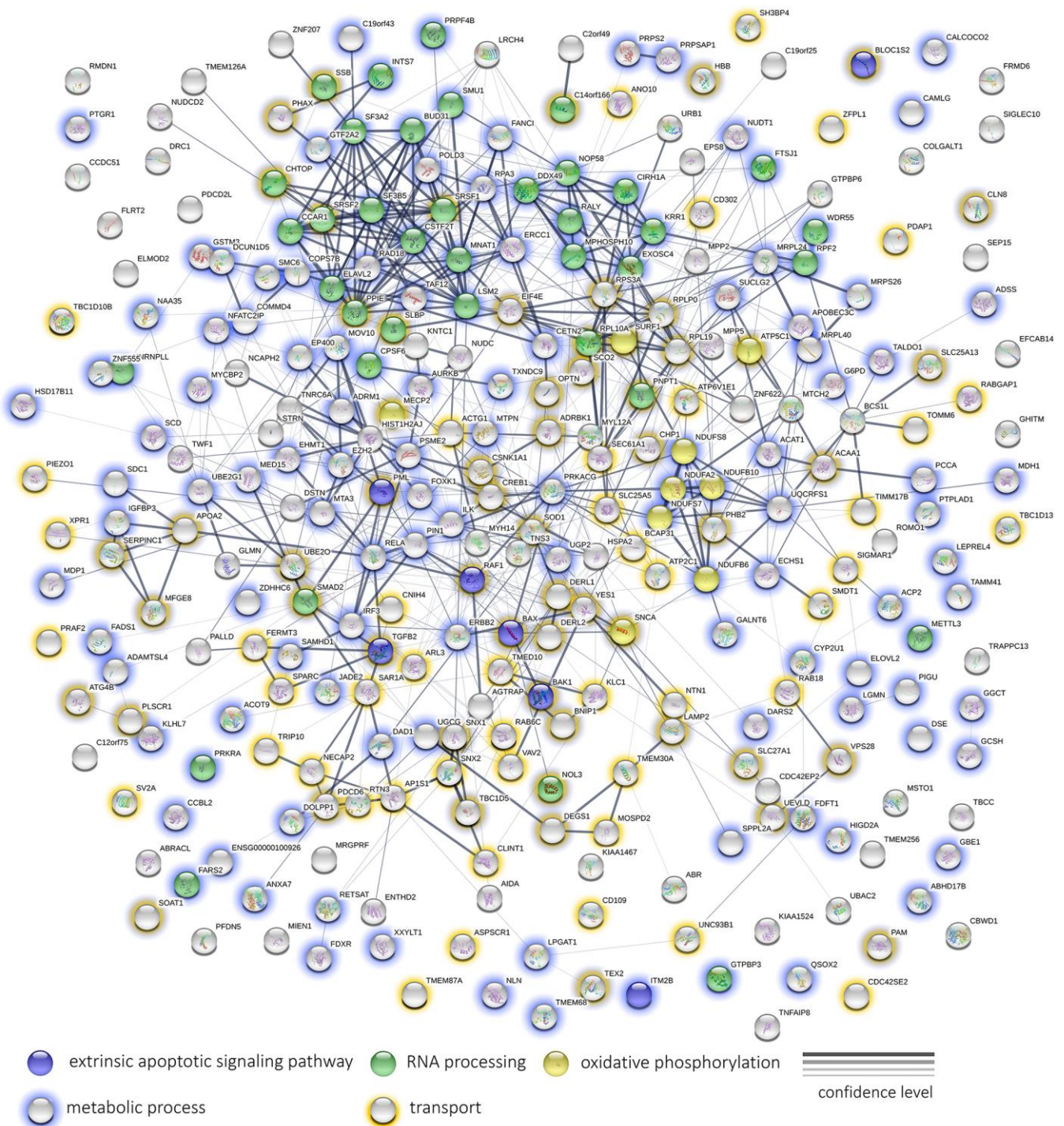
Top 5000 differentially expressed genes (control- 5 $\mu\text{g/ml}$ - 50 $\mu\text{g/ml}$)



Supplementary Figure 3. Heatmap demonstrating expression level profiles of top 5000 genes (MRC5-SV40 cell line), expression of which gradually increases/decreases with the increase of Abisyl concentration (0 $\mu\text{g/ml}$ — 5 $\mu\text{g/ml}$ — 50 $\mu\text{g/ml}$).



Supplementary Figure 4. The interaction network of top 300 proteins which content was decreased (or not detected) in MRC5-SV40 cells after Abisil treatment (50 $\mu\text{g}/\text{ml}$). The width of the connecting lines indicates the confidence level of protein interaction (best – mentions in curated databases, experimental data for human; worst – found interacting putative homologs in other organisms).



Supplementary Figure 5. The interaction network of top 300 proteins which content was increased in MRC5-SV40 cells after Abisil treatment (or detected only in treated cells). The width of the connecting lines indicates the confidence level of protein interaction (best – mentions in curated databases, experimental data for human; worst – found interacting putative homologs in other organisms).