

Supplementary Information (SI)

Shank3 insufficiency is associated with age-dependent mitochondrial dysfunction in dendritic and synaptic compartments

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Supplementary information description:

Supplementary figure 1: Quality control of proteomics data (Homogenate)

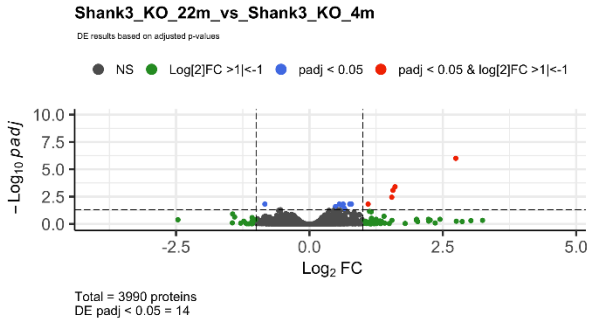
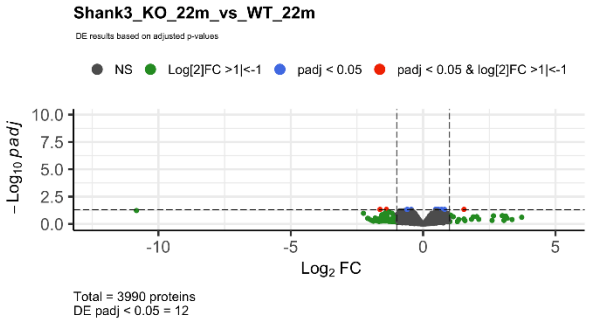
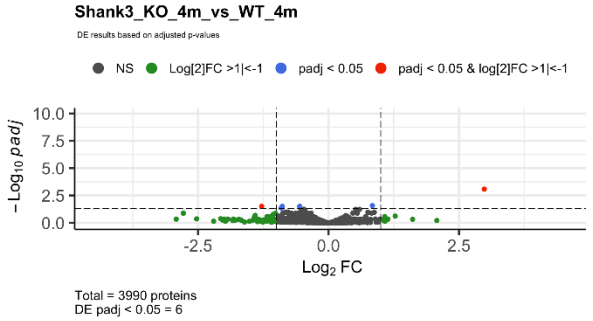
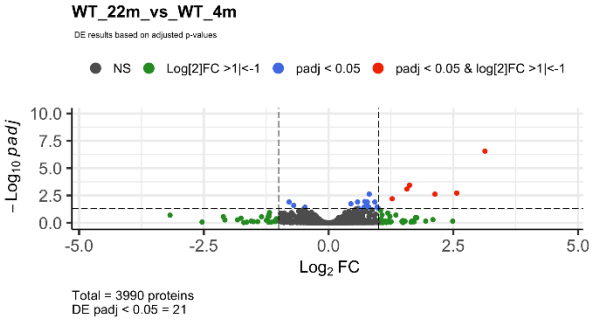
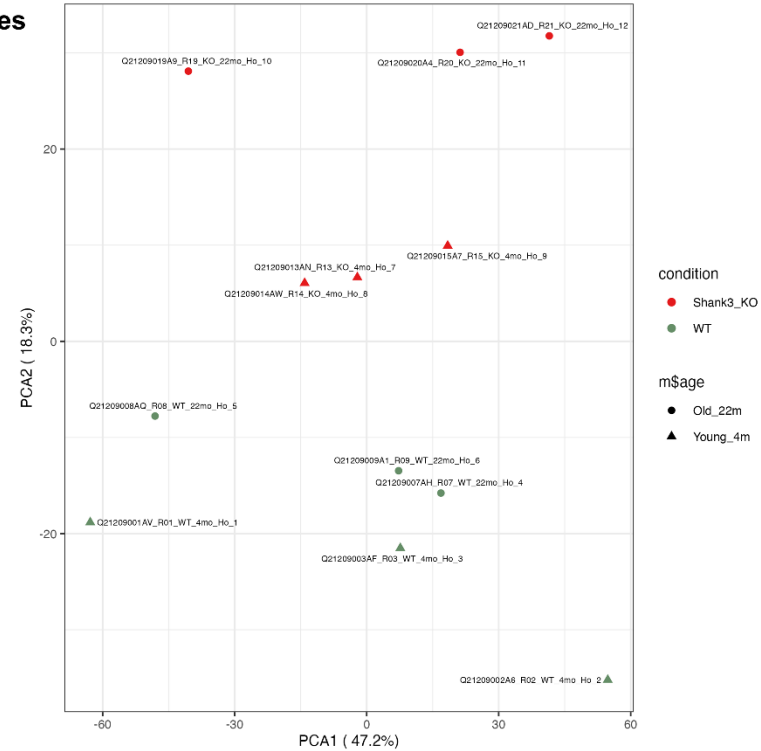
Contains PCA plots showing the distribution of the Homogenates analysed based on PC1 and PC2 and volcano plots reflecting the total number of proteins detected in the Homogenates and the number of proteins showing a significant negative and positive log fold change of expression in each of the comparisons of interest.

Supplementary figure 2: Quality control of proteomics data (Synaptic fraction)

Contains PCA plots showing the distribution of the Synaptic fractions analysed based on PC1 and PC2 and volcano plots reflecting the total number of proteins detected in the Synaptic fractions and the number of proteins showing a significant negative and positive log fold change of expression in each of the comparisons of interest.

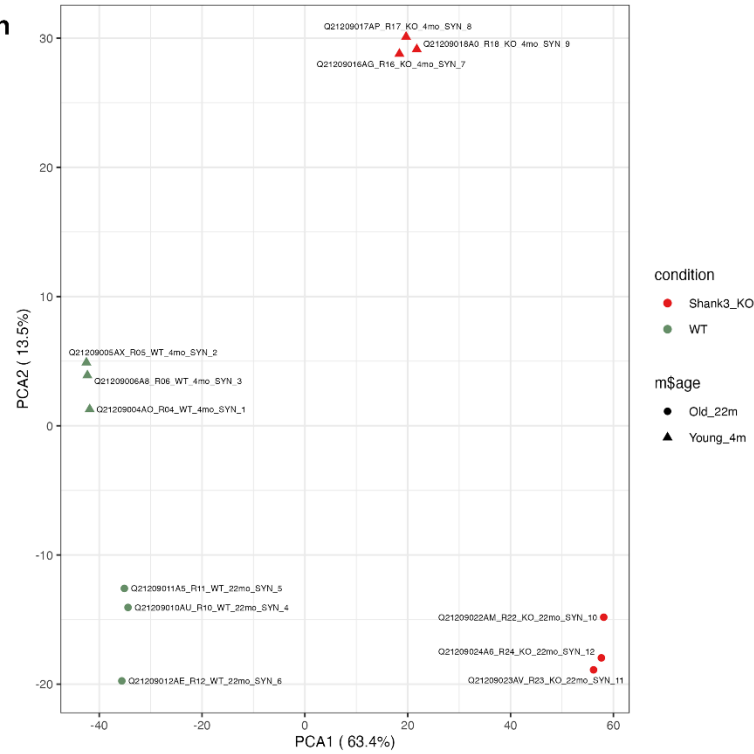
Supplementary Figure 1: Quality control of proteomics data

Homogenates



Supplementary Figure 2 : Quality control of proteomics data

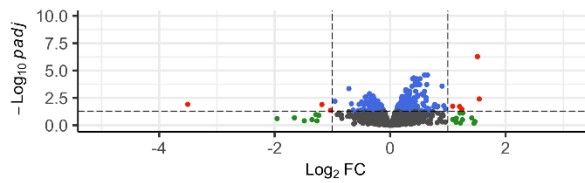
Synaptic fraction



WT_22m_vs_WT_4m

DE results based on adjusted p-values

● NS ● $\text{Log}_2\text{FC} > 1 | < -1$ ● $\text{padj} < 0.05$ ● $\text{padj} < 0.05 \text{ \& } \text{log}_2\text{FC} > 1 | < -1$

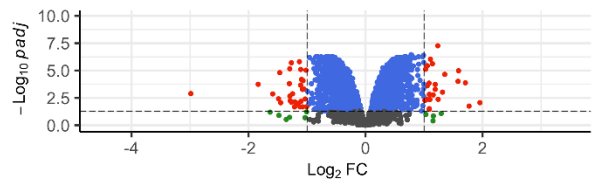


Total = 3971 proteins
DE $\text{padj} < 0.05 = 332$

Shank3_KO_4m_vs_WT_4m

DE results based on adjusted p-values

● NS ● $\text{Log}_2\text{FC} > 1 | < -1$ ● $\text{padj} < 0.05$ ● $\text{padj} < 0.05 \text{ \& } \text{log}_2\text{FC} > 1 | < -1$

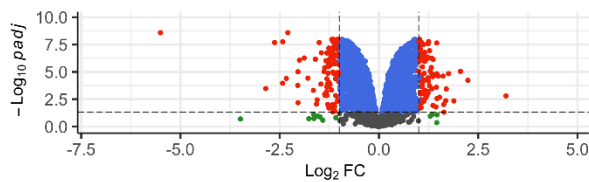


Total = 3971 proteins
DE $\text{padj} < 0.05 = 2253$

Shank3_KO_22m_vs_WT_22m

DE results based on adjusted p-values

● NS ● $\text{Log}_2\text{FC} > 1 | < -1$ ● $\text{padj} < 0.05$ ● $\text{padj} < 0.05 \text{ \& } \text{log}_2\text{FC} > 1 | < -1$

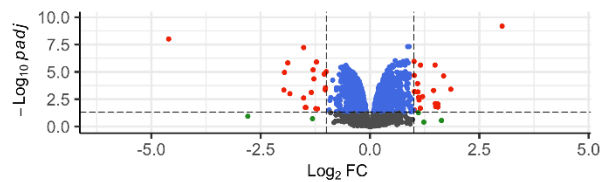


Total = 3971 proteins
DE $\text{padj} < 0.05 = 2599$

Shank3_KO_22m_vs_Shank3_KO_4m

DE results based on adjusted p-values

● NS ● $\text{Log}_2\text{FC} > 1 | < -1$ ● $\text{padj} < 0.05$ ● $\text{padj} < 0.05 \text{ \& } \text{log}_2\text{FC} > 1 | < -1$



Total = 3971 proteins
DE $\text{padj} < 0.05 = 1802$