Figure S1

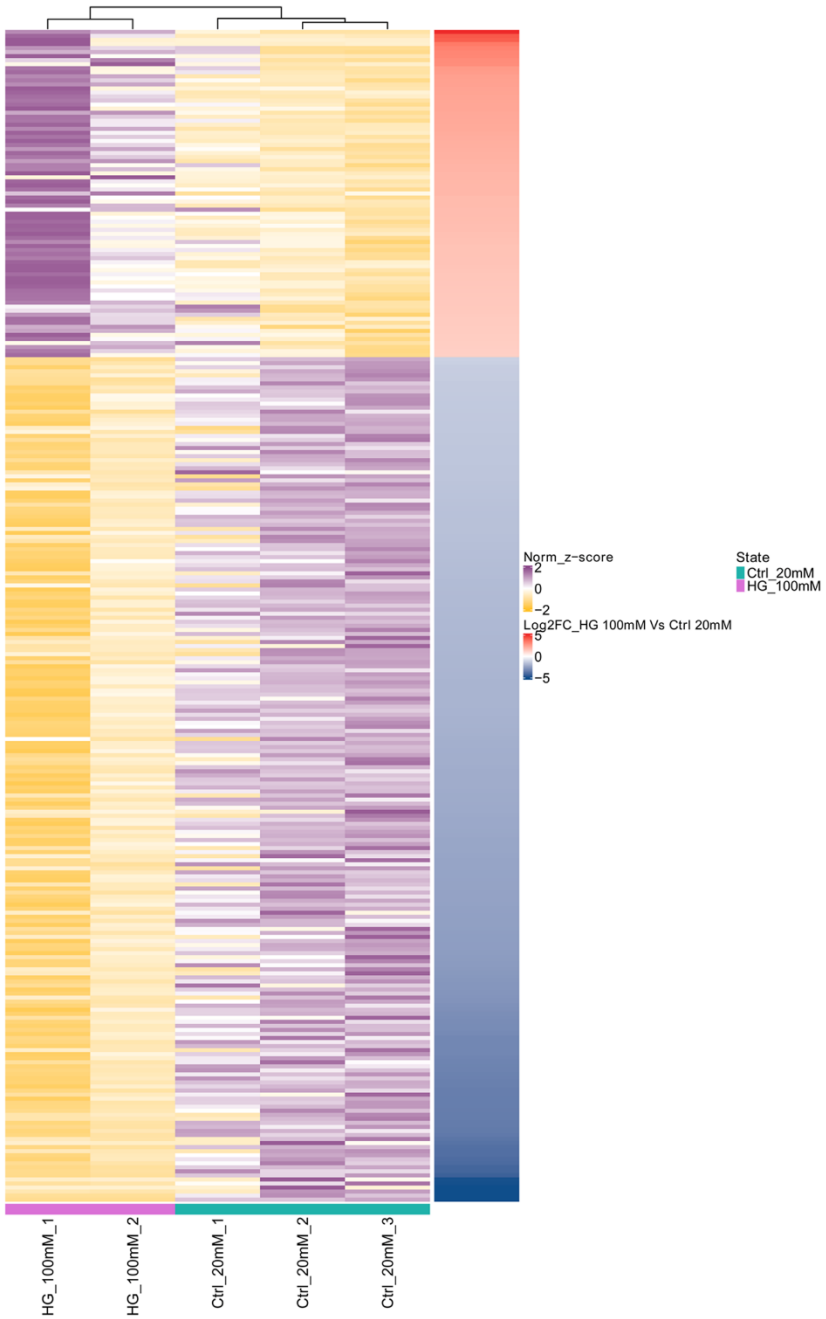

Figure S1. Heatmap showing the expression profile of all differentially expressed genes (p adj < 0.05), identified between HG-treated (100mM D-glucose, 48h) neurons (purple) and control neurons (green). 81 genes were significantly up-regulated and 209 were down-regulated in HG-treated neurons compared to control.

Figure S2

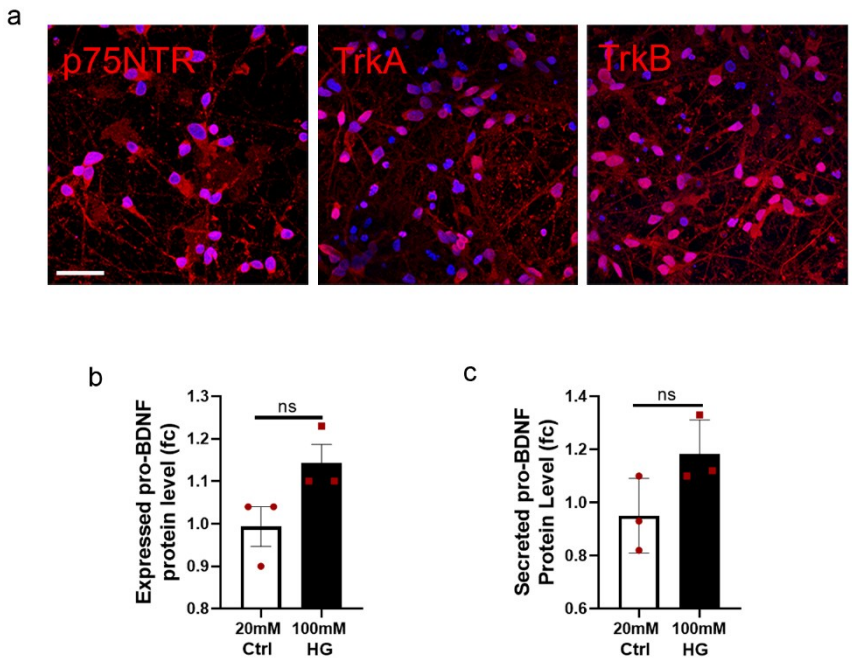

Figure S2. Neurotrophin receptors and pro-BDNF levels in DA neurons. a) Immunofluorescence staining of the neurotrophin receptors p75NTR, TrkA and TrkB in iPSC-derived DA neurons at differentiation day 21. Scale bar 50µm. b,c) ELISA quantification of pro-BDNF levels in b) the cell lysate and c) the supernatant of DA neurons treated with HG (100mM) for 48hcompared to Control. For b & c data are presented as mean ± SEM of three biological replicates. Statistical significance was evaluated with an unpaired t-test (for b P=0.07, for c P=0.1).

Figure S3

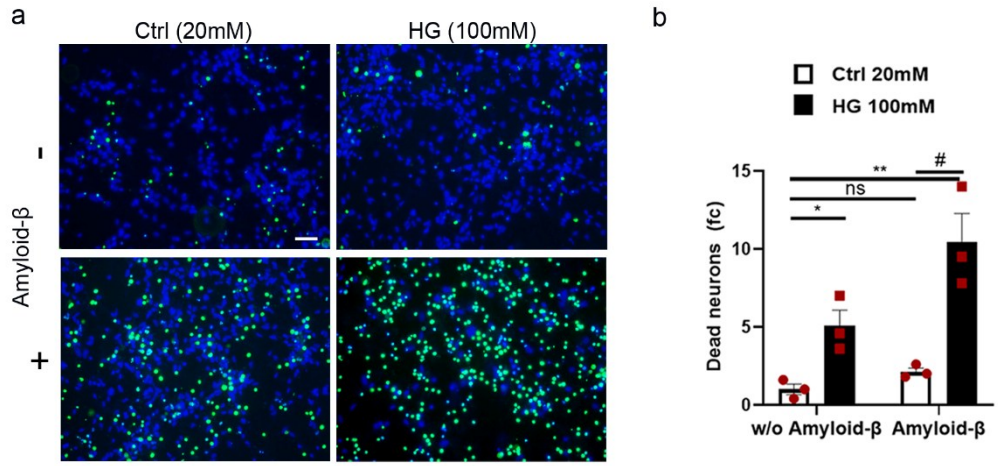

Figure S3. High glucose triggers DA neuron susceptibility to Amyloid-β 1-42. (a) Representative images and (b) quantification of dead (green) neurons upon exposure to HG (100mM) and/or 10μM oligomers of Amyloid-β 1-42 for 48 h. Scalebar 50μm. For b data are shown as mean ±SEM of three biological replicates. Statistical significance was evaluated with two-way ANOVA (Column factor P=0.0004, Raw factor P=0.001) and post hoc unpaired t-test (*&#P<0.05, **P<0.01).

Figure S4

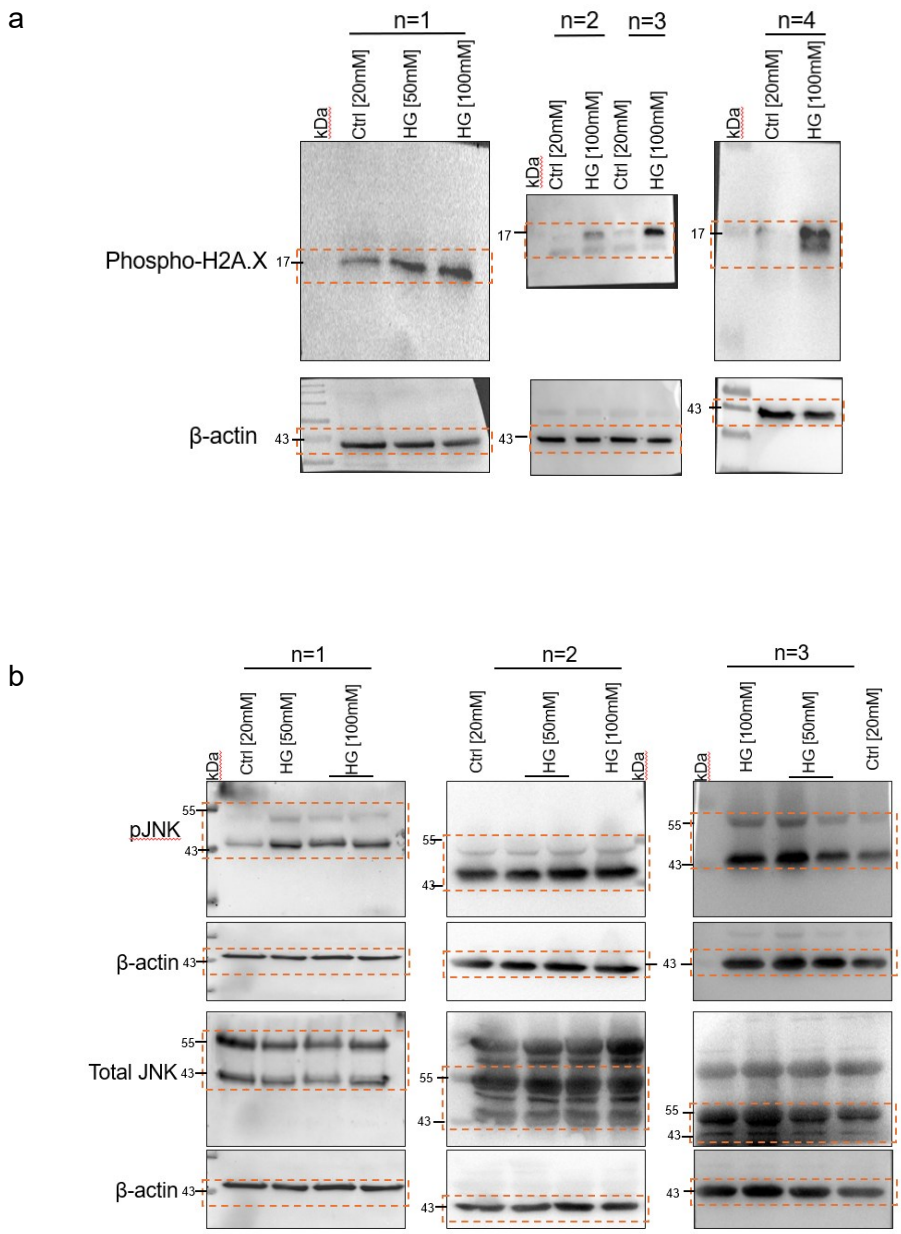

Figure S4. Corresponding full-length Western blots of Figure1c, e.

Figure S5

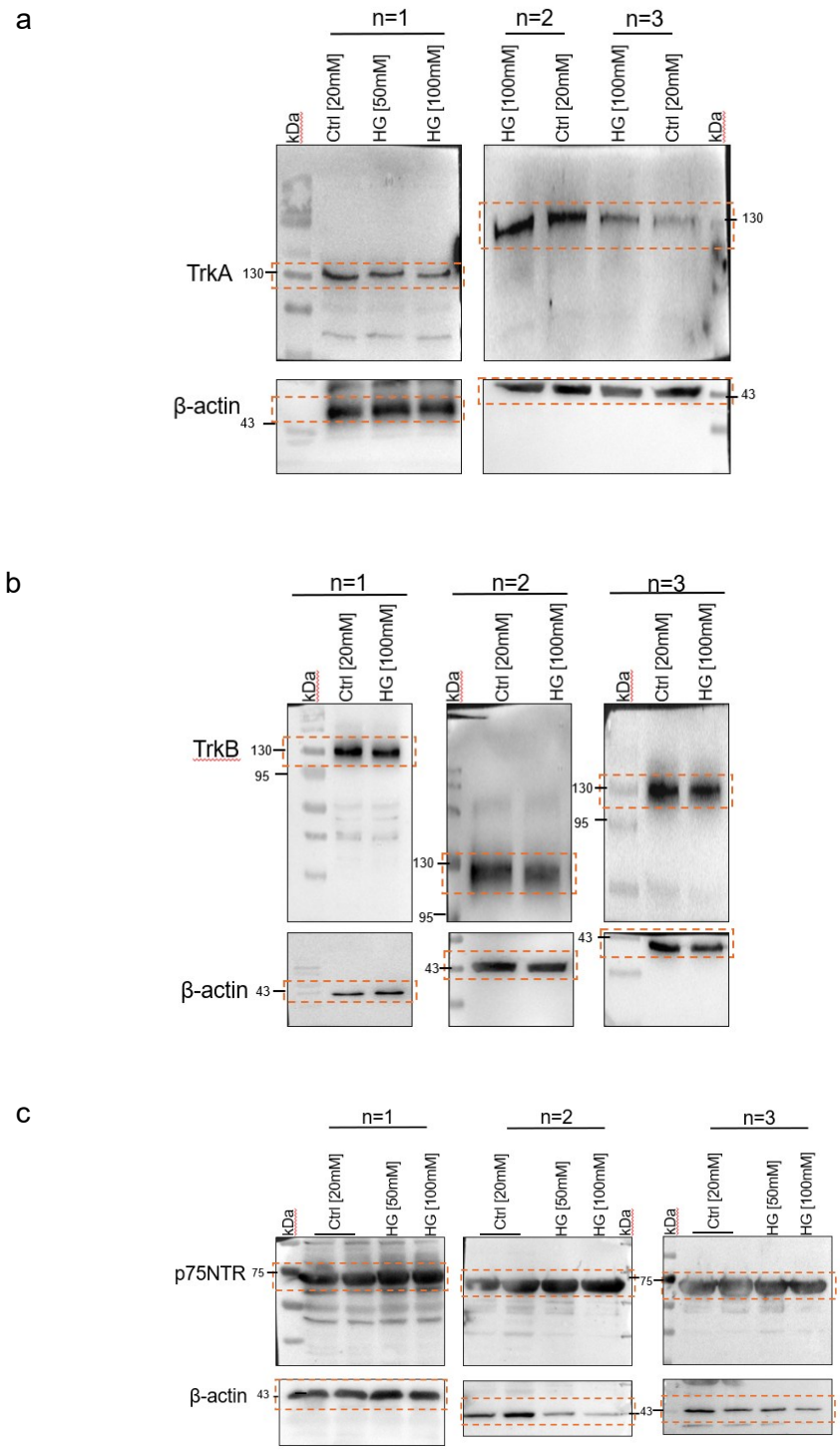

Figure S5. Corresponding full-length Western blots of Figure 3a, b.