

**Online Resource 12** Proteomic analysis. Volcano plot (a) showed 108 up-(green) and 70 downregulated (red) DEPs (FC > 1.5, p value < 0.05). Venn diagrams identified that are present in the different cellular types, neurons (b), microglia (c) and astrocytes (d), and interact with pathological proteins in AD. Cellular responses to stress, regulation of proteolysis and response to wounding were exposed as impaired processes by functional analysis with Metascape (f). DEPs: differentially expressed proteins