

Figure S6

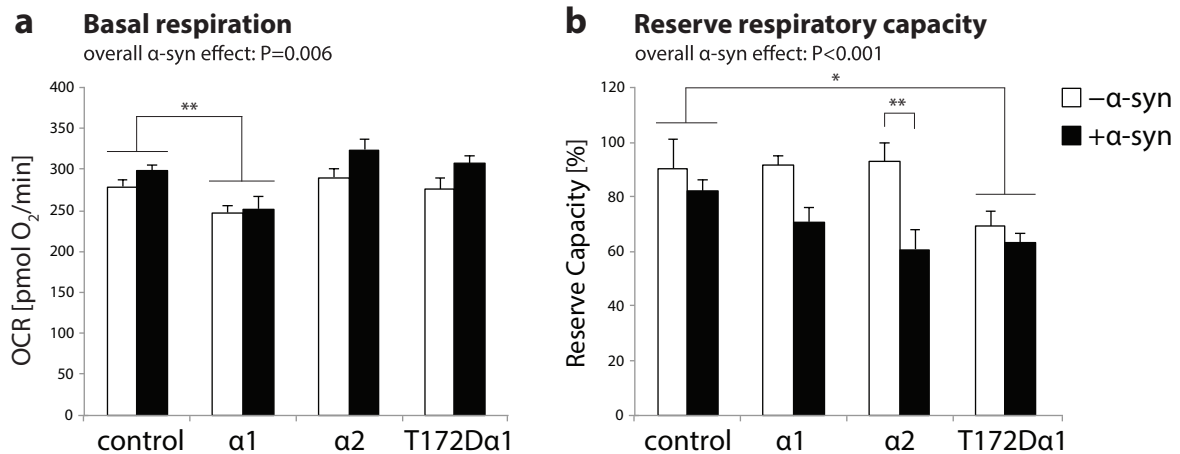


Fig S6. Mitochondrial respiration in cortical neurons co-expressing AMPK α and α -syn

(a) Basal oxygen consumption rate (OCR), expressed as the mean of four measurements. Note that AMPK $\alpha 1$ overexpressing neurons have statistically lower basal OCR compared to control, whilst α -syn induces an overall increase in OCR. Significant differences in the multiple comparisons are indicated on the graph for the AMPK and α -syn effects.

(b) Reserve respiratory capacity of neurons across conditions, calculated as the percentage increase in OCR following CCCP exposure. Overexpression of α -syn results in a significant decrease in the reserve respiratory capacity, in particular in neurons overexpressing AMPK $\alpha 1$ and $\alpha 2$. As compared to the control condition, neurons overexpressing T172Da1 show a lower reserve respiratory capacity, independently from α -syn overexpression. Significant differences in the multiple comparisons are indicated on the graph for the AMPK and α -syn effects.

Statistical analysis: two-way factorial ANOVA (α -syn x AMPK α) with Tukey's HSD post hoc test; $n=10-12$ wells of separately infected neurons; * $P<0.05$, ** $P<0.01$.