Neurochemical Research

p75NTR modulation by LM11A-31 counteracts oxidative stress and cholesterol dysmetabolism in a rotenone-induced cell model of Parkinson's Disease

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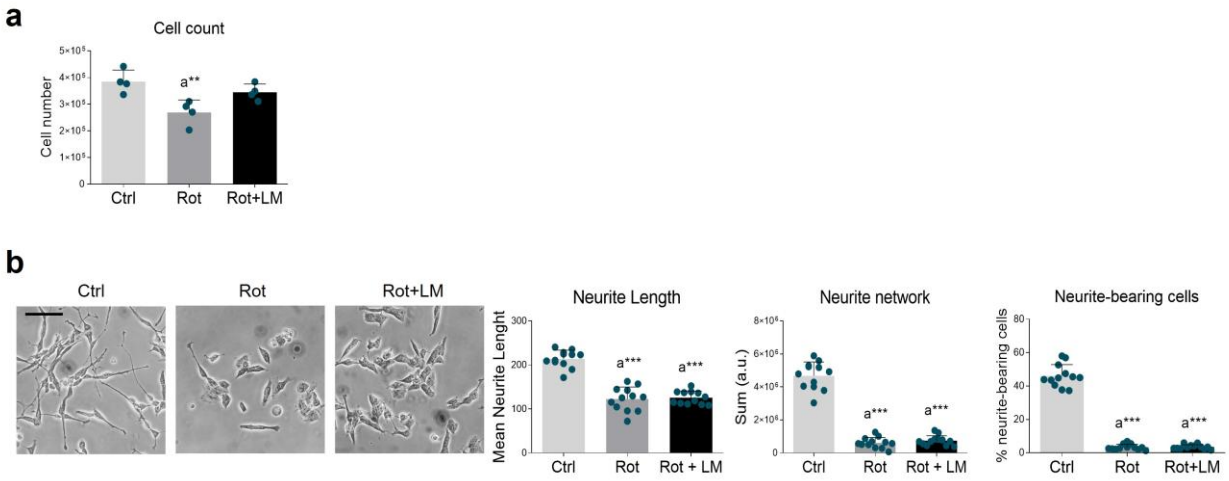
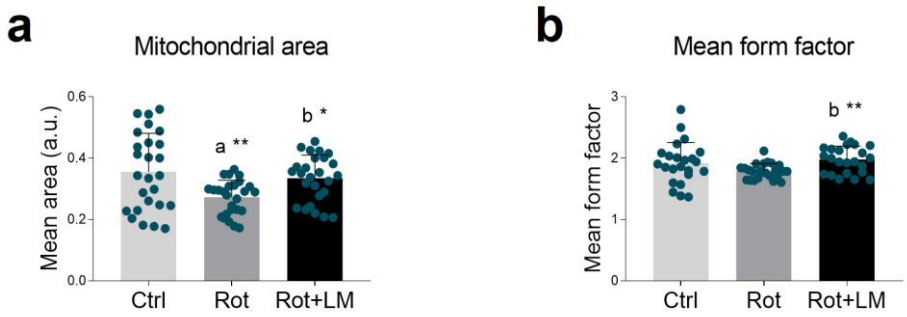
Supplementary information

Supplementary Figure 1



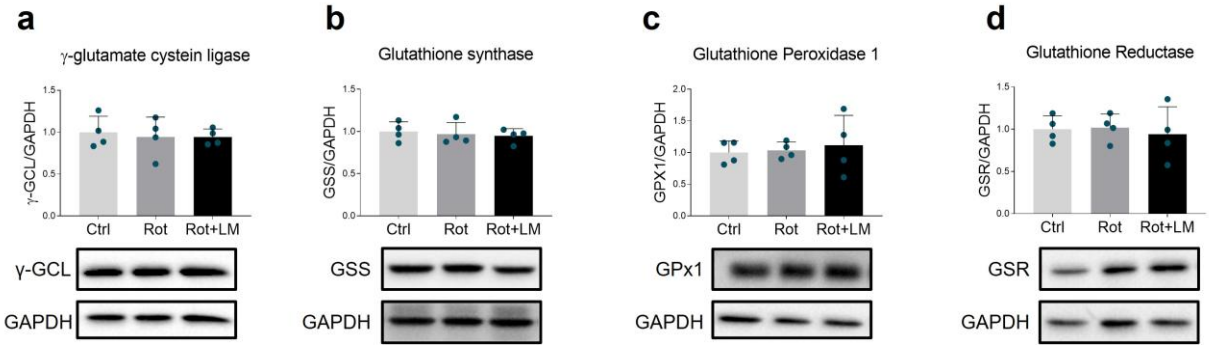
Supplementary Figure 1 (**a**) Cell count on differentiated SH-SY5Y cells treated with vehicle (Ctrl, DMSO), 100 nM rotenone (Rot) or rotenone with 100 nM LM11A-31 (Rot+LM) for 24 h. N=4 independent experiments. (**b**) Representative brightfield images (left panel) and morphological analysis of the neurite length, neurite network and % of neurite-bearing cells (right panel) were conducted on SH-SY5Y differentiated cells treated as reported in (a). N=9 biological replicates. Data are represented as means ± SD. The blue dots around the SD represent the different biological measurements. Statistical analysis was performed by using one-way ANOVA followed by Tukey's post hoc test. "a" indicates statistical significance vs Ctrl, "b" indicates statistical significance vs Rot. * $p < 0.05$, ** $p < 0.01$.

Supplementary Figure 2



Supplementary Figure 2 (**a**) Statistical analysis of mitochondrial area and (**b**) mean form factor on differentiated SH-SY5Y cells treated with vehicle (Ctrl, DMSO), 100 nM rotenone (Rot) or rotenone with 500 nM LM11A-31 (Rot+LM) for 24 h. N=23-26 images were analyzed from 6 independent experiments. Data are represented as means ± SD. Statistical analysis was performed by using one-way ANOVA followed by Tukey's post hoc test. "a" indicates statistical significance vs Ctrl. *** $p < 0.001$.

Supplementary Figure 3



Supplementary Figure 3 Representative Western blots and densitometric analysis of (**a**) γ-GCL, (**b**) GSS, (**c**) GPX1, (**d**) GSR in differentiated SH-SY5Y treated with DMSO (Ctrl), 100 nM rotenone (Rot) or rotenone with 500 nM LM11A-31 (Rot+LM) for 24h. GAPDH was chosen as loading control. N=4 biological replicates. Data are expressed as mean ± SD. Statistical analysis was assessed using the one-way ANOVA test, followed by Tukey's *post hoc* test.