

Oxaliplatin induces pH acidification in dorsal root ganglia neurons

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Figure S1

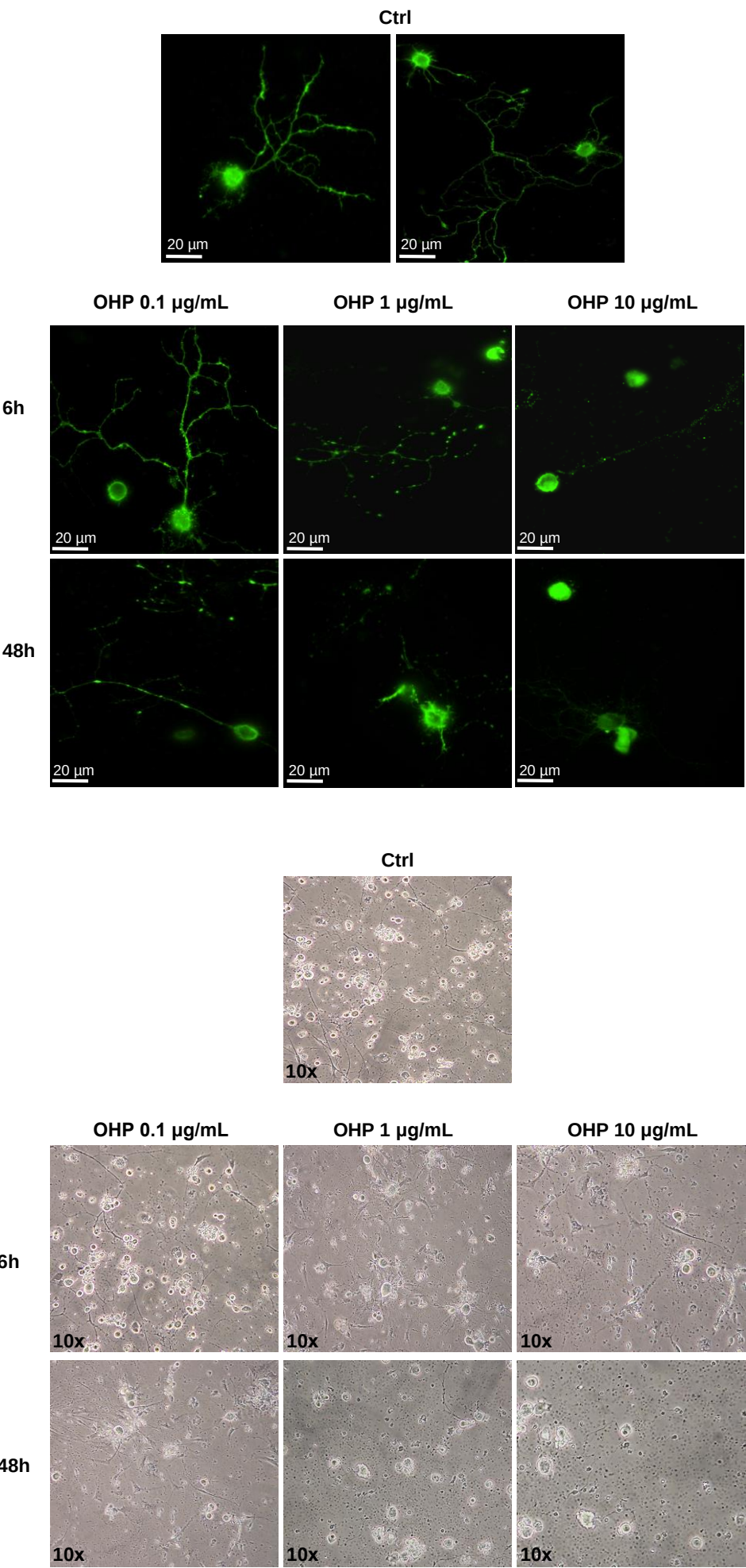
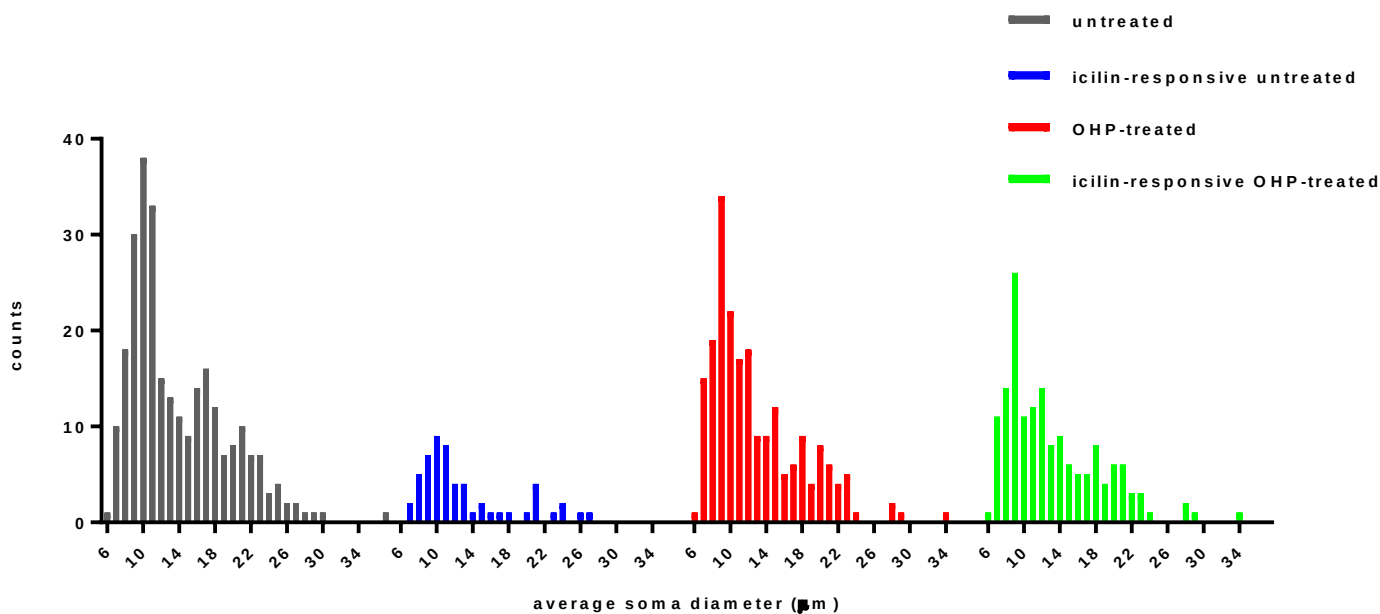


Figure S2

a



b

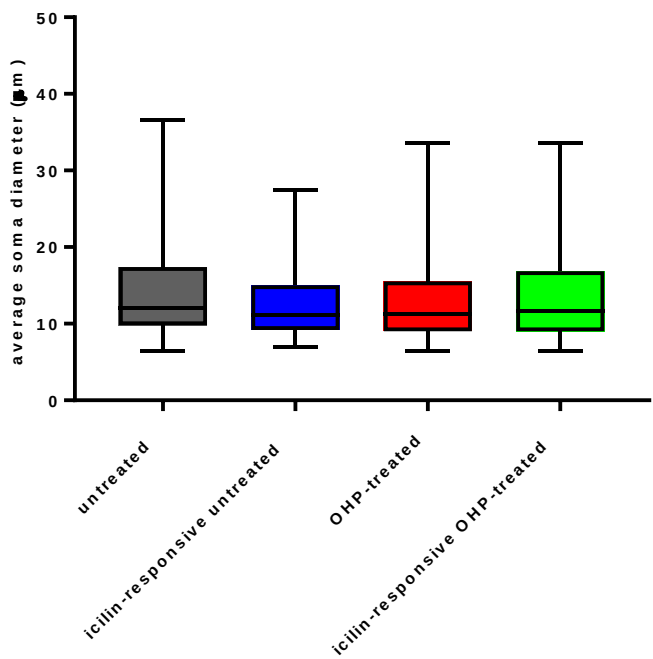


Figure S3

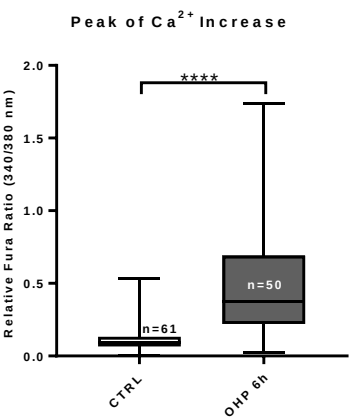
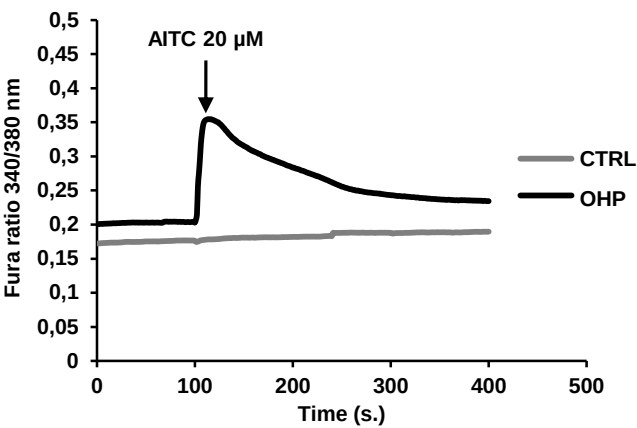


Figure S4

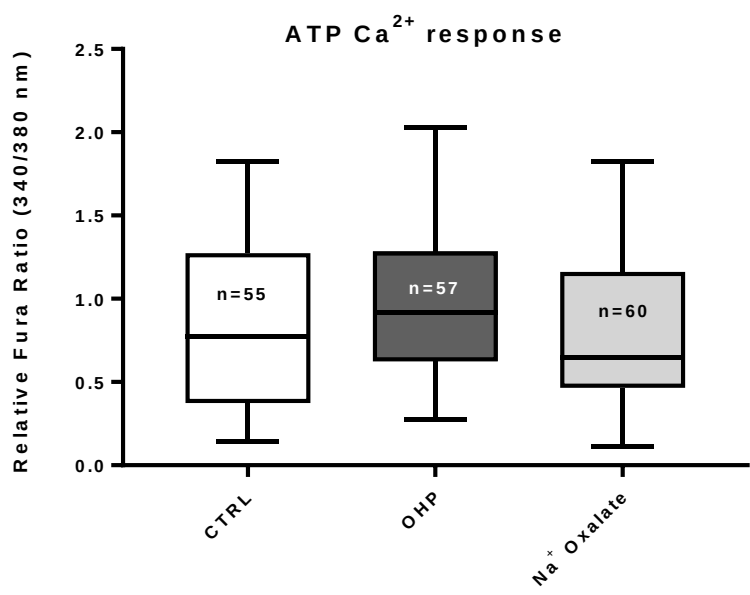
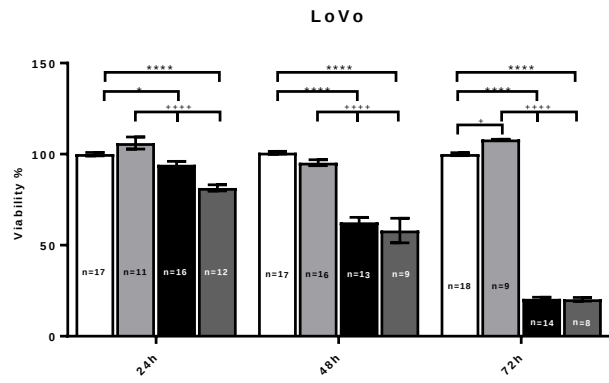
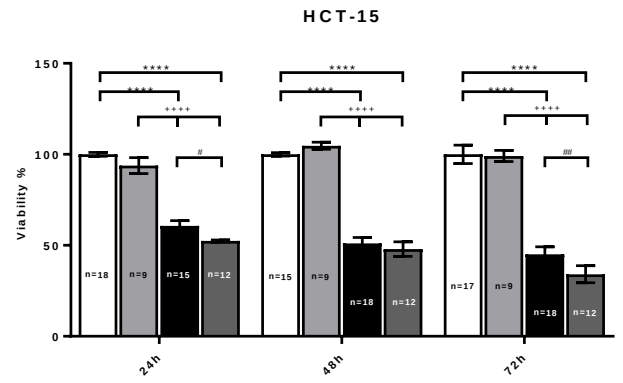


Figure S5

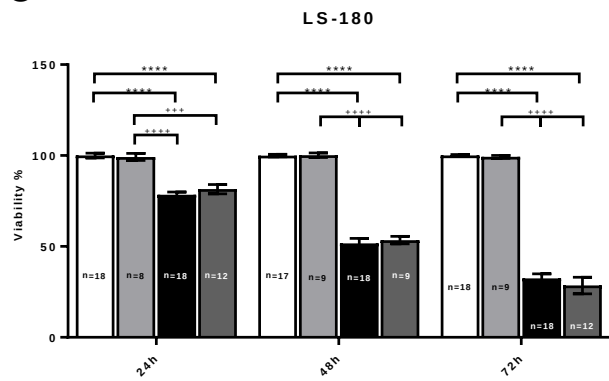
a



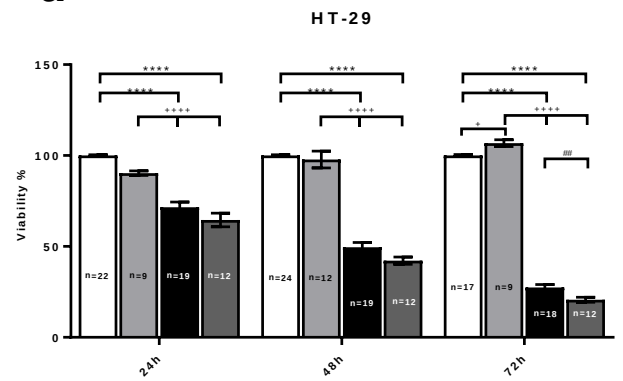
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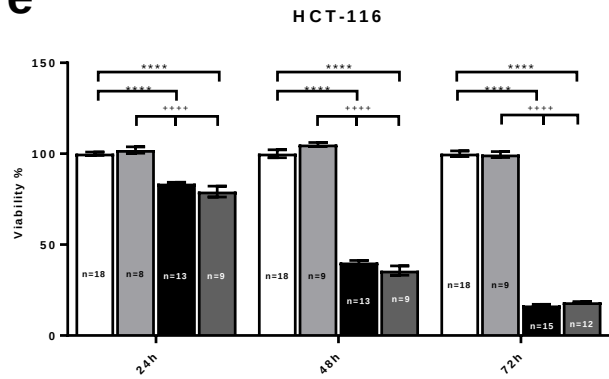
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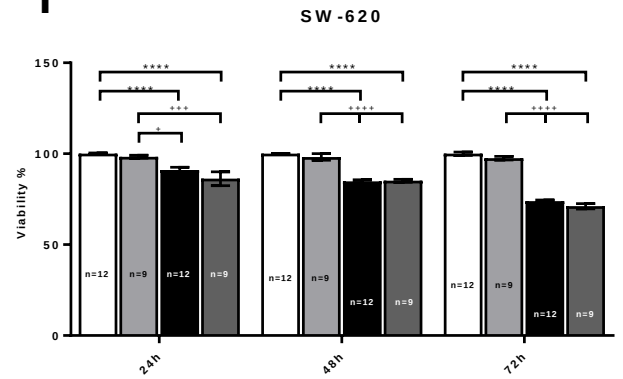
d



e



f



CTRL Na Oxalate OHP OHP + Na Oxalate

Cell lines	P values legend			
LoVo	****P<10 ⁻⁶	*P=0.0117	****P<10 ⁻⁶	++P=0.0015
HCT-15	****P<10 ⁻⁶	****P<10 ⁻⁶	##P=0.0015	#P=0.040
LS-180	****P<10 ⁻⁶	****P<10 ⁻⁶		
HCT-116	****P<10 ⁻⁶	****P<10 ⁻⁶		
HT-29	****P<10 ⁻⁶	****P<10 ⁻⁶	+P=0.021	##P=0.0028
SW-620	****P<10 ⁻⁶	****P<10 ⁻⁶	+++P=0.0005	+P=0.027

Figure S6

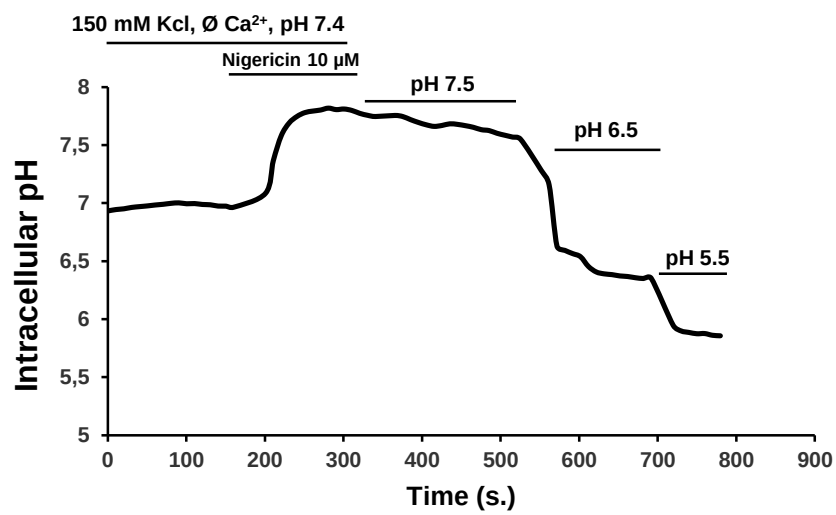


Figure S1. Representative images of DRG neurons cultures.

Immunostainings for GAP-43 in DRG neurons treated at the indicated conditions (top) and representative bright field images (bottom).

Figure S2. Average soma diameter profile of OHP treated and untreated DRG neurons.

(a). Frequency distributions of average soma diameter for untreated neurons (gray bars), untreated neurons that respond to icilin (blue bars), treated neurons (red bars) and for treated neurons that respond to icilin (green bars). (b) Box and whisker plot showing the average soma diameter range and median for the 4 groups showed in A. Kruskal-Wallis H test, $P > 0.99$.

Figure S3. Calcium responses to AITC

DRG neurons treated with OHP (0.1 $\mu\text{g/mL}$) for 6 hours or untreated (Ctrl) were loaded with Fura 2-AM and placed in an extracellular solution containing 2 mM calcium. Traces are the average of the cells indicated in the corresponding bar graphs, obtained from 5-7 independent coverslips. Box and whisker plots show median and IQR of peak of calcium changes. Mann-Whitney U test; **** $P < 10^{-6}$.

Figure S4. Calcium responses to ATP in the presence of OHP (0.1 $\mu\text{g/mL}$) or sodium oxalate (0.3 $\mu\text{g/mL}$). Data obtained from 3-5 independent experiments. Box and whisker plots show median and IQR of peak of calcium changes. Kruskal-Wallis H test, $P = 0.17$ ctrl vs OHP; $P > 0.99$ ctrl vs oxalate; $P = 0.08$ OHP vs oxalate.

Figure S5. Cytotoxicity of OHP (3 $\mu\text{g/mL}$) in the indicated cells lines in the presence or absence of sodium oxalate (9 $\mu\text{g/mL}$). Histograms show the mean $\pm$ S.E.M from three separate experiments. One-way analysis of variance followed by Tukey's post-hoc. At the bottom, the legend for statistical significance is shown.

Figure S6. Effect of nigericin on intracellular pH, determined by BCECF, in high potassium extracellular solutions (see text). OHP-treated DRG neurons were challenged with nigericin and pH standard solutions were then added to the neurons for calibration.