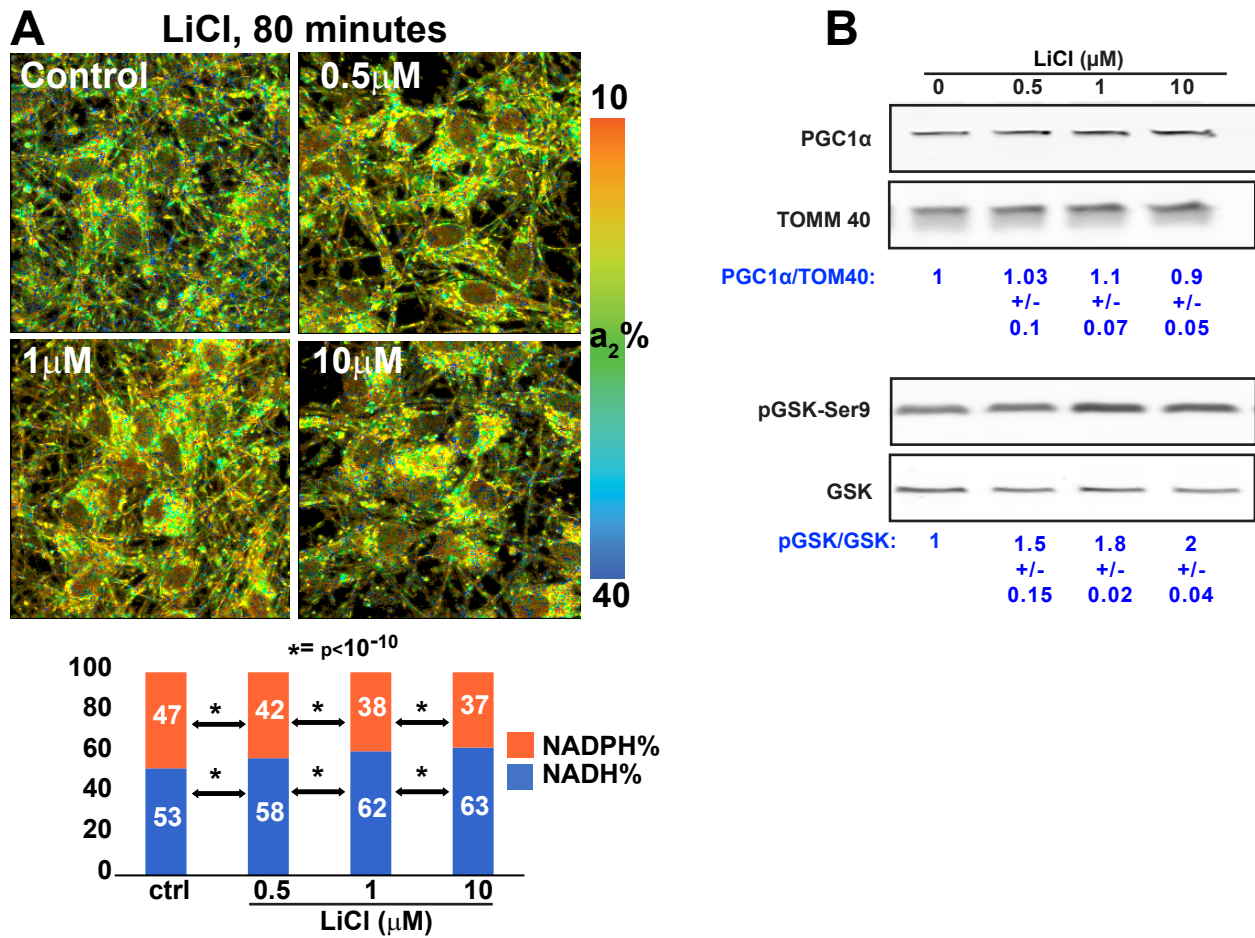


### Supplemental Figure 3 Norambuena et al.



#### Supplemental Figure 3. Lithium stimulates mitochondrial activity in human neurons in culture and WT live mouse brain.

A, Neuron cultures derived from the RenCell VM line of human neuronal progenitors were differentiated for 20 days. Then, one culture was left untreated (control) while others were treated with LiCl at the indicated concentrations for ~80 minutes. 2P-FLIM analysis revealed that inhibition of GSK3β increased the fraction of bound NADH, indicating a rise in mitochondrial respiration. Statistical analyses were performed using Student's two-tailed unpaired t-test. The experiment is representative of 3 independent assays. B, LiCl efficiency was tested by western blots of protein samples from the same experiments used for 2P-FLIM. LiCl increased phosphorylation of the inhibitory site Ser-9 on GSK3β by ~50% without affecting the expression of the mitochondrial transcription factor PGC1α. The experiment is representative of 3 independent assays.