

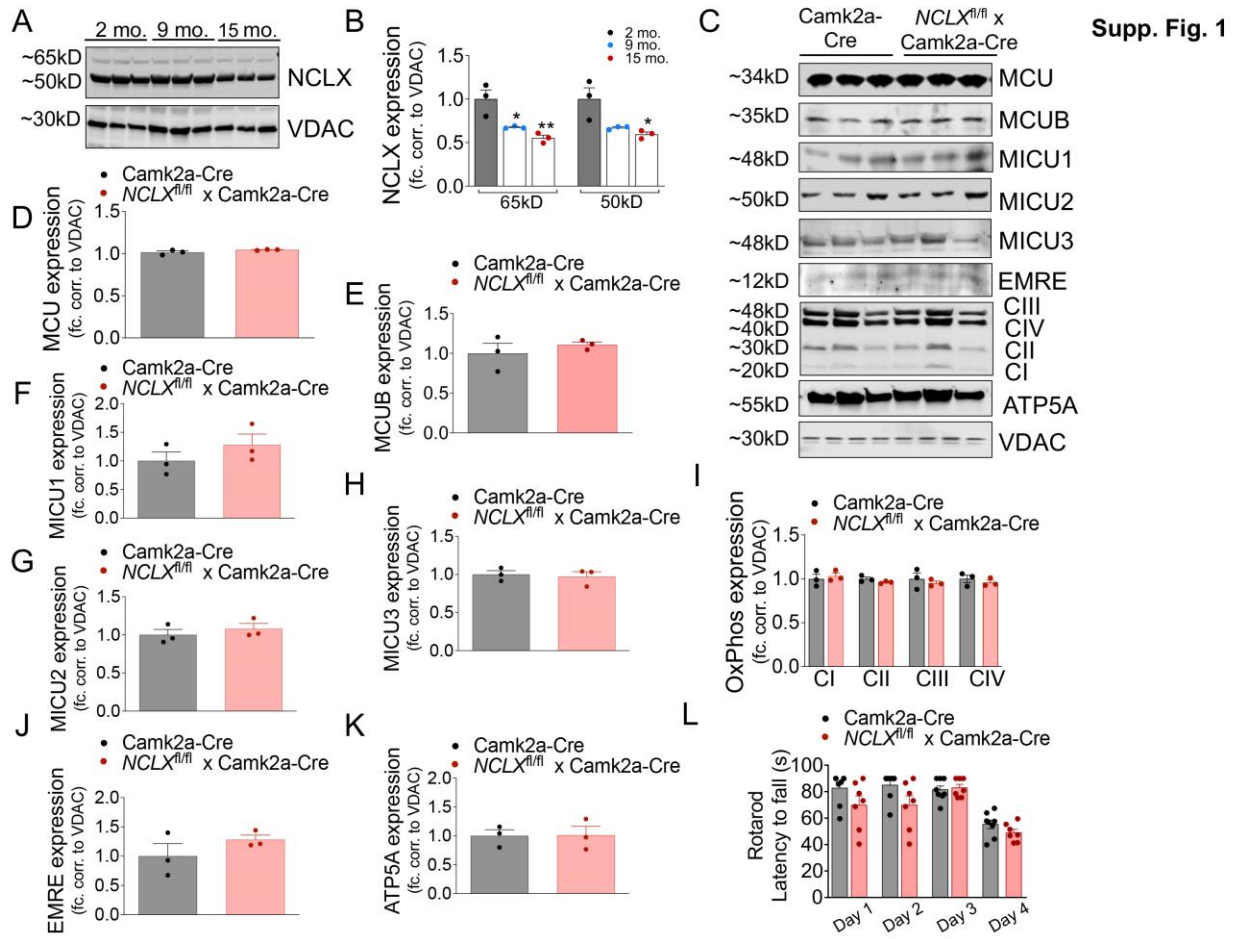
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Supplemental information

Neuronal loss of NCLX-dependent mitochondrial calcium efflux mediates age-associated cognitive decline

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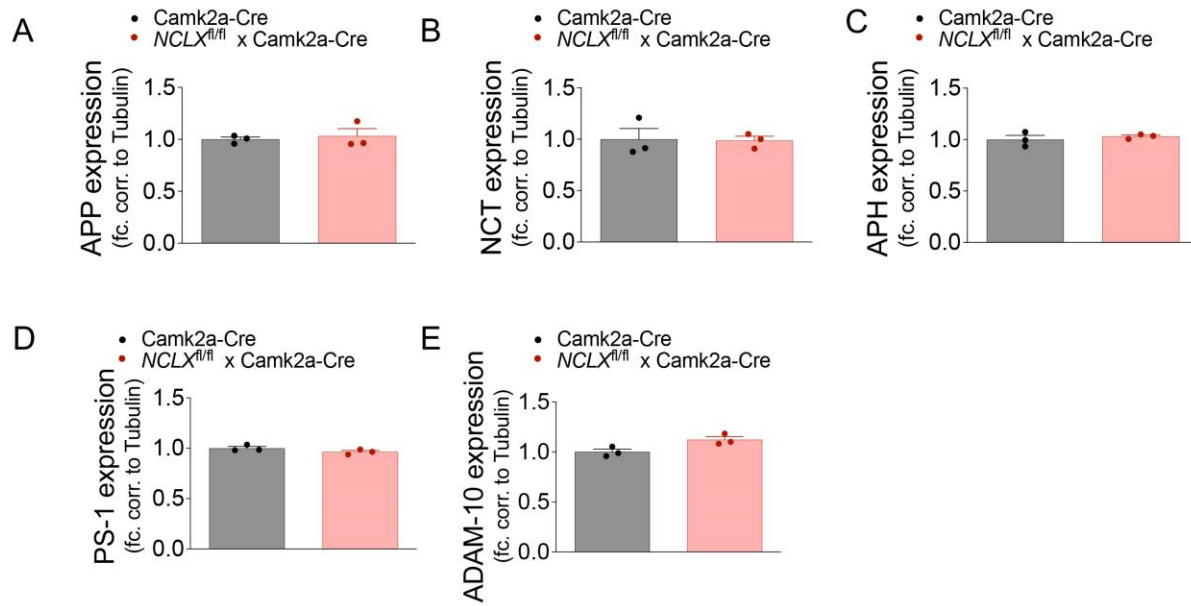
Supplementary figures and legends



Supplementary Figure 1, related to Figure 1. mCa^{2+} exchanger expression and cognitive assay.

A Western blot for NCLX expression in tissue isolated from the cortex of 2-, 9-, and 15-month-old control (Camk2a-Cre) mice. **B** Quantification of NCLX protein expression expressed as fold change vs. 2-month-old Camk2a-Cre con. corrected to voltage-dependent anion channel (VDAC). **C** Western blot for proteins associated with mCa^{2+} exchange expression in tissue isolated from the cortex of 2-month-old $NCLX^{fl/fl}$ x Camk2a-Cre mice compared to age-matched controls (Camk2a-Cre). **D-K** Densitometric analysis of western blots shown in Figure S1A expressed as fold change vs. Camk2a-Cre con. corrected to VDAC. **L** Rotarod test for locomotor performance, training phase (day 1 to 3), and test phase (day 4) in 15-month-old mice. n = 3-7. All data presented as mean \pm SEM; two-tailed, unpaired t-test.

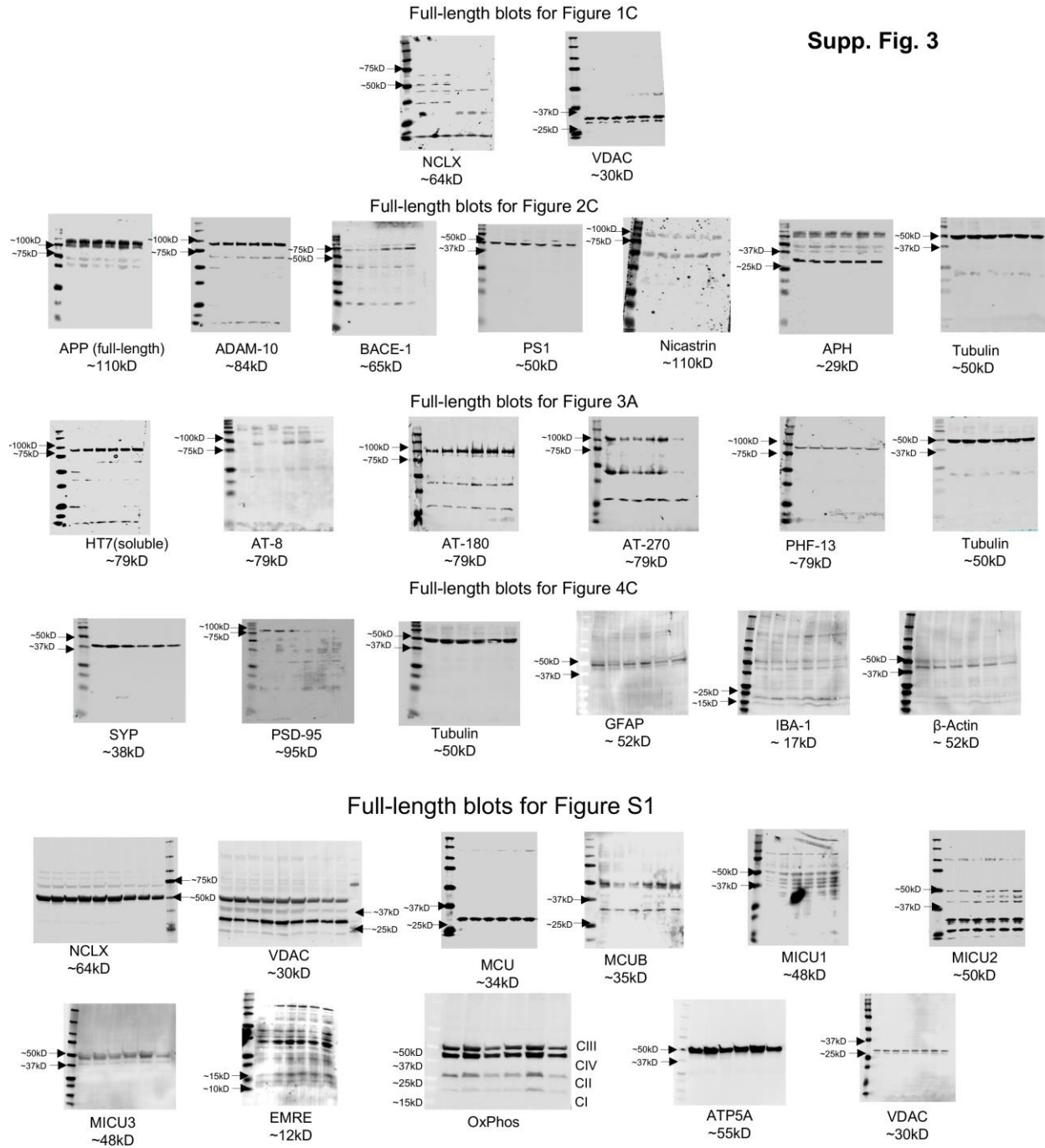
Supp. Fig. 2



Supplementary Figure 2, related to Figure 2. Effect of genetic ablation of neuronal mCa^{2+} efflux on the A β pathway.

A-E Densitometry analysis of Western blots shown in Figure 2C expressed as fold change vs. Camk2a-Cre con. corrected to a loading control tubulin. n = 3. All data presented as mean \pm SEM; two-tailed, unpaired t-test.

Supp. Fig. 3



Supplementary Figure 3, related to Figure 1, 2, 3 and 4. Full-length Western blots.