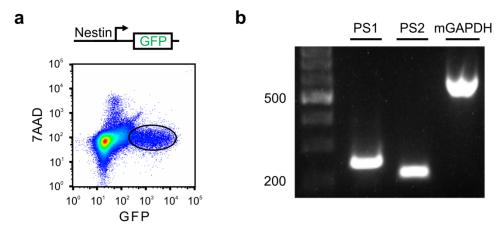
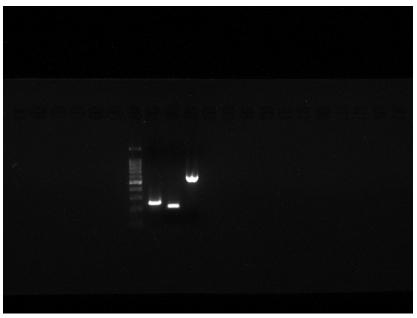
## **Supplemental Documents**

## Adult hippocampal neurogenesis occurs in the absence of *Presenilin 1* and *Presenilin 2*

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Supplemental Figure 1. Presentiins are expressed in Nestin-GFP-expressing stem and precursor cells in the dentate gyrus. a) Density-scatter plots of FACS-isolated cells from the dentate gyrus of adult Nestin-GFP mice. b) Sorted GFP+ cells express mRNA for PS1, PS2 and control mGAPDH.



Supplemental Figure 2. Full-length Gel presented in Supplemental Figure 1.

|   | WT              | Control         | vDKO            |
|---|-----------------|-----------------|-----------------|
| Membrane Resistance (R <sub>M</sub> ; MΩ)           | 341.3 ± 78.0    | 417.4 ± 54.0    | 426.8 ± 71.6    |
| Resting Membrane Potential (V <sub>Rest</sub> ; mV) | -81.02 ± 2.1    | -82.5 ± 2.4     | -75.5 ± 2.8     |
| Estimated Cell Capacitance (C <sub>M</sub> ; pF)    | $45.8 \pm 8.0$  | 48.8 ± 3.5      | 61.7 ± 19.7     |
| Estimated Tau (ms)                                  | $33.2 \pm 3.7$  | $46.4 \pm 6.9$  | $37.1 \pm 5.7$  |
| Action Potential Amplitude (First Two Spikes) (mV)  | 109.5 ± 5.6     | 117.2 ± 1.6     | 113.7 ± 3.5     |
| Time to Peak (First Two Spikes) (ms)                | 1.92 ± 0.03     | $1.62 \pm 0.03$ | 1.70 ± 0.07     |
| Action Potential Amplitude (Last Two Spikes) (mV)   | 107.3 ± 5.0     | 103.3 ± 2.5     | 100.2 ± 4.4     |
| Time to Peak (Last Two Spikes) (ms)                 | $2.04 \pm 0.05$ | $1.86 \pm 0.05$ | $2.03 \pm 0.11$ |
| N (cells/mice)                                      | 5/2             | 7/3             | 9/3             |

Supplemental Table 1. Electrophysiological properties of GFPCre+ virally-labeled NPCs. Related to Figure 4. Data are presented as the mean ±SEM.