

January 9, 2023

## SUPPLEMENTARY INFORMATION

### **Somatostatin slows A $\beta$ plaque deposition in aged $App^{NL-F/NL-F}$ mice by blocking A $\beta$ aggregation**

Declan Williams<sup>1</sup>, Bei Qi Yan<sup>1,2</sup>, Hansen Wang<sup>1</sup>, Logine Negm<sup>1</sup>, Christopher Sackmann<sup>1</sup>, Claire Verkuyl<sup>1,2</sup>, Vanessa Rezai-Stevens<sup>1</sup>, Shehab Eid<sup>1,2</sup>, Nimit Vediya<sup>1</sup>, Christine Sato<sup>1</sup>, Joel C. Watts<sup>1,3</sup>, Holger Wille<sup>4,5</sup>, Gerold Schmitt-Ulms<sup>1,2\*</sup>

<sup>1</sup>Tanz Centre for Research in Neurodegenerative Diseases

<sup>2</sup>Department of Laboratory Medicine & Pathobiology, University of Toronto

<sup>3</sup>Department of Biochemistry, University of Toronto, Toronto, Ontario, Canada.

<sup>4</sup>Department of Biochemistry, University of Alberta, Edmonton, Canada;

<sup>5</sup>Centre for Prions and Protein Folding Diseases, University of Alberta, Edmonton, Canada.

\*Please address correspondence to: g.schmittulms@utoronto.ca

#### **Supplementary Figure 1. Indel sequence of $Sst^{-/-}$ allele determined by Sanger sequencing.**

In addition to depicting the indel, the image shows the position of forward and reverse primers used in this study for genotyping.

#### **Supplementary Figure 2. Hippocampal A $\beta$ amyloid plaque counts in 12- or 15-month-old $App^{NL-F/NL-F}$ mice that express wild-type Sst levels or were Sst-deficient.**

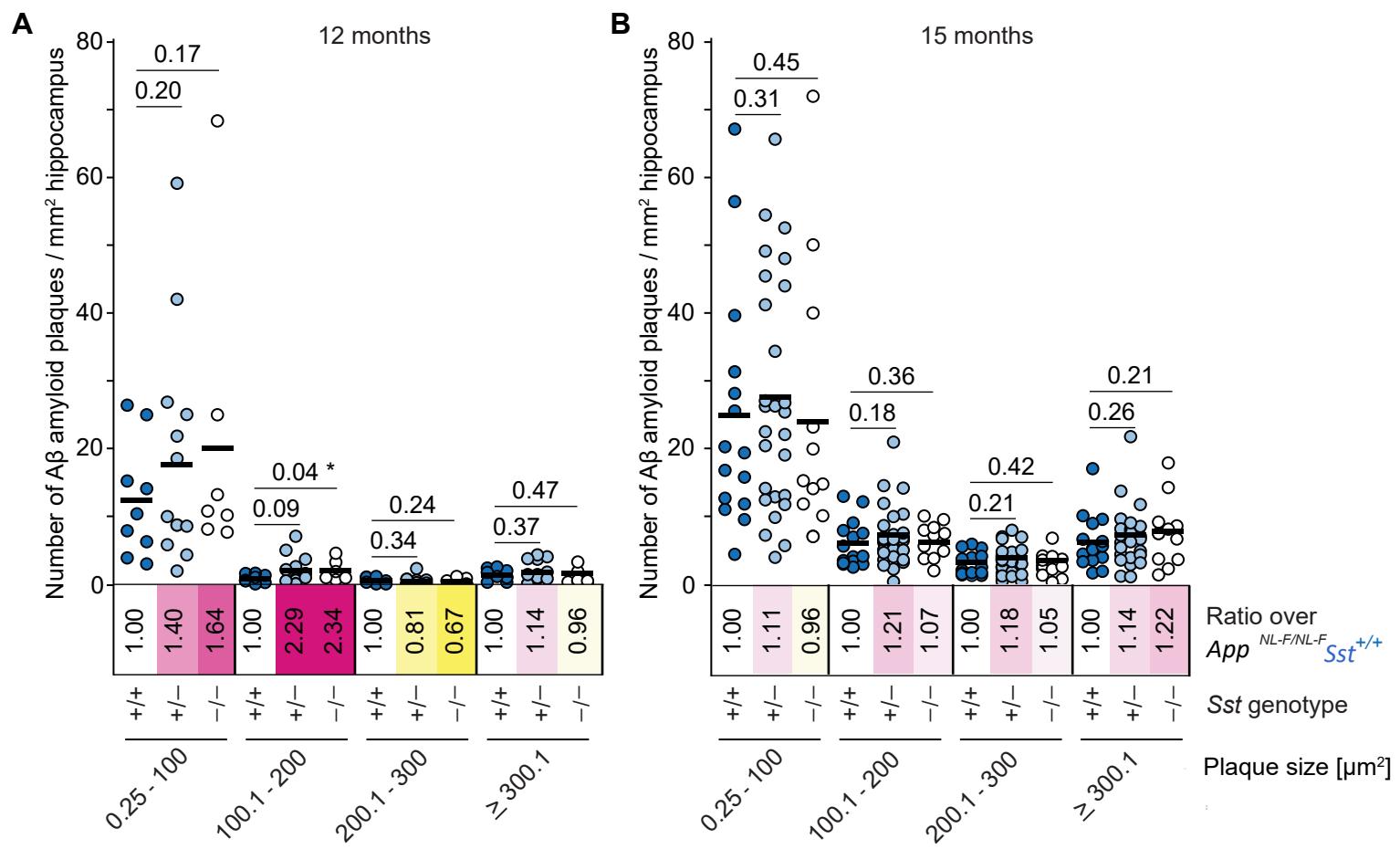
Hippocampal A $\beta$  amyloid plaque densities increased between 12- and 15-month-old  $App^{NL-F/NL-F}$  mice. Differences in hippocampal A $\beta$  amyloid plaque densities were observed when comparing  $App^{NL-F/NL-F}$  mice that expressed wild-type Sst versus Sst-deficient mice. More specifically, a trend toward higher A $\beta$  plaque densities of small sizes (0.25-200  $\mu$ m) was observed in 12-month-old Sst gene-deficient mice, echoing the increase in A $\beta$  amyloid plaque densities observed in the cortex of Sst ablated  $App^{NL-F/NL-F}$  mice (**Fig. 3F**).

#### **Supplementary Figure 3. Original images of Coomassie stains and western blots.**

## Supplementary Figure 1

**Supplementary Figure 2**

Hippocampus data



### Supplementary Figure 3

