SUPPLEMENTARY INFORMATION

Somatostatin slows Aβ plaque deposition in aged *APP^{NL-F/NL-F}* mice by blocking Aβ aggregation

Declan Williams¹, Bei Qi Yan^{1,2}, Hansen Wang¹, Logine Negm¹, Christopher Sackmann¹, Claire Verkuyl^{1,2}, Vanessa Rezai-Stevens¹, Shehab Eid^{1,2}, Nimit Vediya¹, Christine Sato¹, Joel C. Watts^{1,3}, Holger Wille^{4,5}, Gerold Schmitt-Ulms^{1,2}*

¹Tanz Centre for Research in Neurodegenerative Diseases
² Department of Laboratory Medicine & Pathobiology, University of Toronto
³Department of Biochemistry, University of Toronto, Toronto, Ontario, Canada.
⁴Department of Biochemistry, University of Alberta, Edmonton, Canada;
⁵Centre 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 β amyloid plaque counts in 12- or 15-month-old App^{NL-F} F/NL-F mice that express wild-type Sst levels or were Sst-deficient.

Hippocampal A β amyloid plaque densities increased between 12- and 15-month-old $App^{NL-F/NL-F}$ mice. Differences in hippocampal A β 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 β plaque densities of small sizes (0.25-200 µm) was observed in 12-month-old *Sst* gene-deficient mice, echoing the increase in A β 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

Start of insetion

5' ·	atccaggaaaccagcagcggctatccgcgcatccatgcccccgaactgcag	Jagtgggggggcacgatggccgctttggtcccggatcctgcaactgaggtat	ttgcttcttccttaaat		
3' ·	- taggtcctttggtcgtcgccgataggcgcgtaggtacgggggcttgacgtcctcacccctccgtgctaccggcgaaaccagggcctaggacgttgactccataaacgaagaaggaattta				
	pNEO fragment (U13862.1)	pSV529HIFNG (L	T727634.1)		
	—				
	Jackson Labs mutant forward primer (oIMR 7989)	Alternate Sst mutant forward primer			
	ctggtgttgatgcaatgtactgcaaacaatggcctgagtgtgcaaagaaaatgtctgctaactgcatatgcttgct				
	ggaccacaactacgttacatgacgtttgttaccggactcacacgtttctttt	acagacgattgacgtatacgaacgacacgaatgactcctacttcgtactttt	atcttttaatatgtcc		

a gagattta a agct cta aggt a a atata a a attttta agt g ta ta atg t g t					
***************************************		++++++++++++++++++++++++++++++++++++++			
ct ta a a tt c g a g a tt c c a tt ta a a a tt c a c a ta tt g a c g a c g a c g a c g a c g c g g g g					
		Sst WT sequence 3' of indel			

Jackson Labs reverse primer (oIMR 7982)

◀



Supplementary Figure 2



Supplementary Figure 3

