Supp. Fig. 4



Supp. Fig. 4. Analysis of a Syn transcripts (A, B, D) and proteins (C, E). A. RT-PCR using primers (sequence in Material and Methods) designed to identify $h\alpha Syn$ produced the expected 512 bp band in $h\alpha Syn^{tm1}$ mice, but not in $h\alpha Syn^{TP}$ or $h\alpha Syn^{\Delta 119}$ mice. Data from cortical cDNA of 3 mice aged 1.5 years are shown. L: Ladder. **B.** RT-PCR using primers (Material and Methods) designed to identify $h\alpha$ Syn^{TP} produced the expected 566 bp amplicon in $haSyn^{TP}$ mice. This amplicon was also detected in h aSyn^{tm1} mice, and is the result of read-through transcription. Analogously, RT-PCR using primers identifying $h\alpha Syn^{\Delta 119}$ (sequence in Material and Methods) produced the expected 503 bp band in $h\alpha$ $Syn^{\Delta 119}$ mice. Data from cortical cDNA of 3 mice aged 1.5 years are shown. L: Ladder. C. MS quantification of h α Syn^{TP} protein in 1.5 years old $h\alpha$ Syn^{tm1} mice using a h α Syn^{TP}-specific peptide (aa 61 -80). We found an approximately 10-fold lower amount of h α Syn^{TP} protein in the parental strain when compared to age-matched $h\alpha Syn^{TP}$ mice. **D.** qPCR using $h\alpha Syn$ pan-primers (recognizing wild type or mutant $h\alpha Syn$; sequence in Material and Methods) showed approximately 13 and 9 times more transgenic haSyn transcripts in the parental haSyn^{tm1} and haSyn^{tm2} strains than mutant transcripts in their corresponding $h\alpha Syn^{TP}$ or $h\alpha Syn^{\Delta 119}$ lines. Age of mice was 1.5 years. E. MS quantification of h α Syn $\Delta 119$ protein in 1.5 years old haSyn^{tm2} mice using an haSyn $\Delta 119$ -specific peptide (aa 102 – 119, full length α Syn would generate the aa 102 – 140 C-terminal peptide). We found h α Syn Δ ¹¹⁹ protein in the parental strain but at approximately 4-fold lower level than in age-matched $h\alpha Syn^{\Delta 119}$ mice.