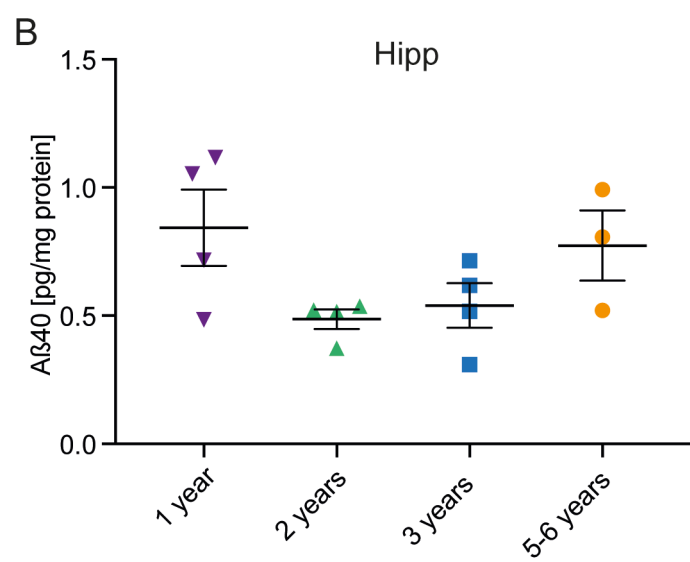
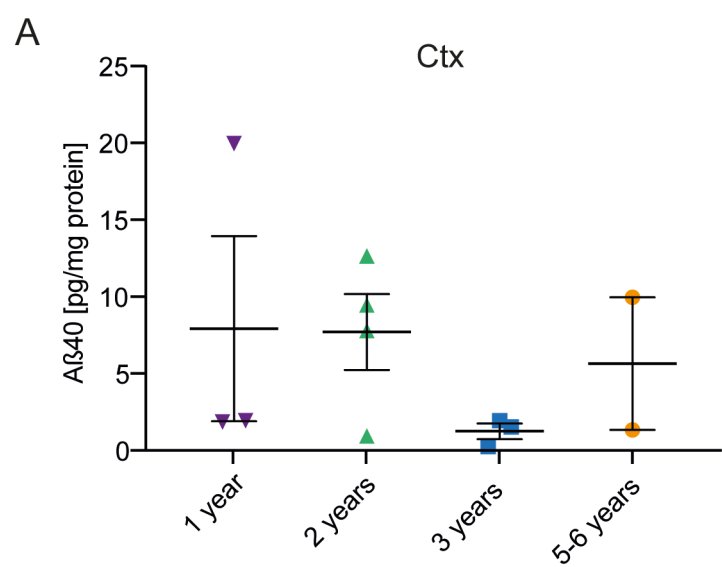


Lack of spontaneous age-related brain pathology in *Octodon degus*: a reappraisal of the model

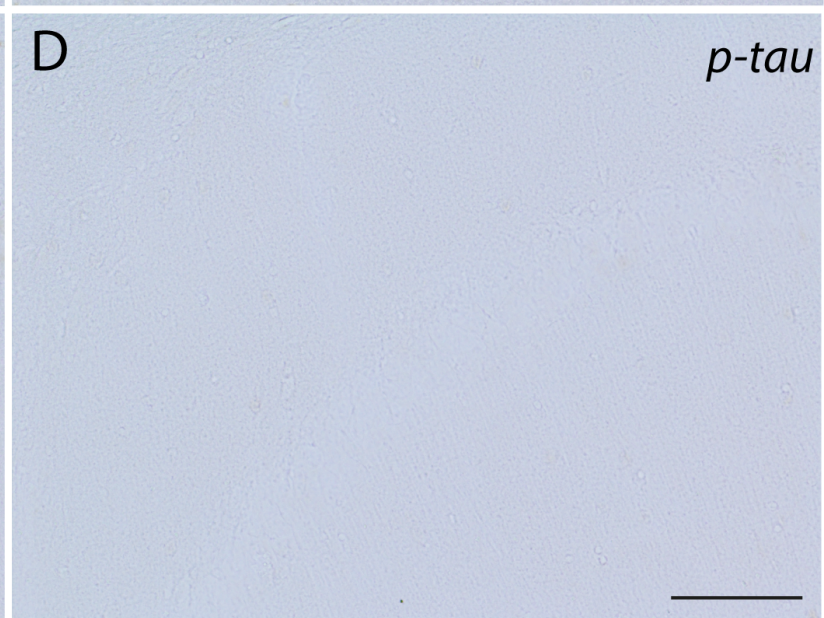
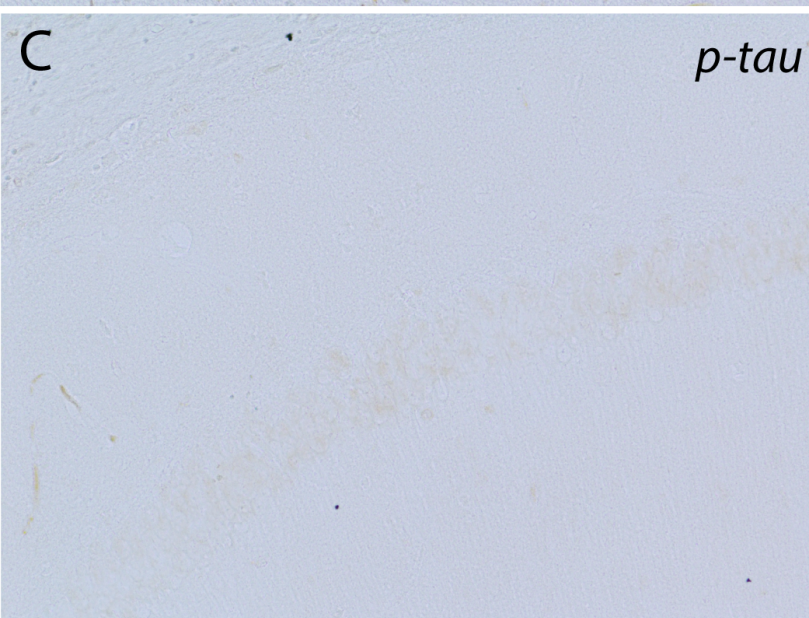
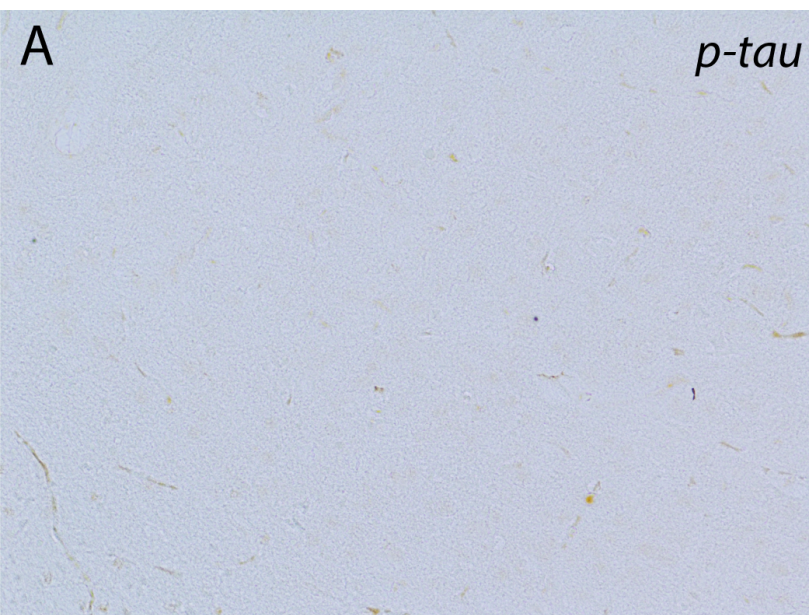
Abbreviated title: Lack of age-related brain pathology in Octodon degus

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Supplementary Information Files:



Supplementary Figure 1. Absence of Alzheimer's like amyloid pathology in cortex and hippocampus of aged octodons. (A-B) Relative levels of A β 40 quantified by ELISA in (A) cortical and (B) hippocampal tissue homogenates.



Supplementary Figure 2. Distribution of phosphorylated-tau immunostaining in the cortex and hippocampus of aged octodons. (A-D) Representative pictures of hyperphosphorylated tau (p-tau) immunostaining in the cortex of 1-year-old (**A**), 2 years-old (**B**), 3 years-old (**C**), 5-6 years-old (**D**) octodons. Scale bar: 100 μ m.

Species	Residues							Sequence Identity
	53	87	100	103	107	121	122	
<i>H. sapiens</i>	A	S	L	N	A	N	N	
<i>M. musculus</i>	T	N	M	G	Y	G	S	133/140 (95%)
<i>R. norvegicus</i>	T	N	M	G	Y	S	S	133/140 (95%)
<i>O. degus</i> (predicted sequence)	T	N	L	S	S	N	S	135/140 (96%)

Supplementary Table 1. Comparison of human and rodent α -synuclein sequences. All amino-acids differing from human sequence are shown. Blue background highlight variations compared to human sequence but identity between rodents. Orange background highlight octodon-specific variations compared to human sequence. Sequence identity is expressed compared to human sequence. Accession number are: NP_000336.1 (*H. sapiens*), NP_001035916.1 (*M. musculus*), NP_062042.1 (*R. norvegicus*), XP_004648456.1 (*O. degus*).

Variable name	Figure	PC1
<i>TH in the striatum</i>	1B	4.4338869
<i>TH on actin ratio</i>	1D	0.1282189
<i>Syn in the Whole brain</i>	2B	13.8916545
<i>Syn in the SN</i>	2C	3.3520295
<i>Syn in the Striatum</i>	2D	11.2880522
<i>Syn in the OF cortex</i>	2E	1.5116652
<i>Syn in the motor cortex</i>	2F	3.6626600
<i>p-syn in the Amygdala</i>	4E	4.8705128
<i>p-syn in the SN</i>	4F	16.0645386
<i>p-syn in the Striatum</i>	4G	7.6355960
<i>p-syn in the OF cortex</i>	4H	8.5947736
<i>Dark p-syn in the OF cortex</i>	4I	4.6157503
<i>Number of Dark p-syn puncta in the OF cortex</i>	4J	6.4038347
<i>Poly Ub ratio in the SN</i>	5B	4.0868168
<i>Poly Ub ratio in the Striatum</i>	5C	4.1165445
<i>Poly Ub ratio in the cortex</i>	5D	1.2217323
<i>Abeta40 levels in the cortex</i>	Supp. 1A	3.6580056
<i>Abeta40 levels in the hippocampus</i>	Supp. 1B	0.4637277

Supplementary Table 2. Variable contributions to principal component 1. The three strongest contributors are highlighted in bold. TH: tyrosine hydroxylase. Syn: α -synuclein staining. SN: substantia nigra. OF: orbito-frontal. Poly Ub: poly-ubiquitinated chains. Psyn: S129 phosphorylated α -syn. Supp.: supplementary figure