**METHODS S1**

*Quantitative RT-PCR*

cDNA synthesized from RNA isolated from various tissues (cortex, hippocampus, cerebellum, olfactory bulb, liver, lung, heart, spleen and kidney) of P4, P12 and 4 months old adult rat, was used for quantitative PCR (Roche light cycler). The primers used for *FBXO31* gene were: sense 5’ CCACTGTTTTAGAATCCATCTGATGGA 3’ and anti-sense 5’ ACTTGGTGGAGAACTCGTCCC 3’ while the primers used for *β-actin* were: sense 5’ CTTCCTCCCTGGAGAAGAGC 3’ and antisense 5’ ATGCCACAGGATTCCATACC 3’. The *FBXO31* levels were normalized to *β-actin* and represented relative to the cortex values for each age group.