## SUPPLEMENTARY MATERIALS

ORIGIN 6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	ATGAACGAAAATCTATTTGCCTCTTTCATTACCCCCACAA ATGAACGAAAATCTATTTGCCTCTTTCATTACCCCCACAA ATGAACGAAAATCTATTTGCCTCTTTCATTACCCCCACAA atgaacgaaaatctatttgcctctttcattaccccacaa	40 40 40
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	TAATAGGTCTACCAATTGTTGTAACCATTATTATGTTCCC TAATAGGTCTACCAATTGTTGTAACCATTATTATGTTCCC TAATAGGTCTACCAATTGTTGTAACCATTATTATGTTCCC taataggtctaccaattgttgtaaccattattatgttccc	80 80 80
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	AT CAA TT CTA TT CCCAT CAT CA AAA CGCCT AA TCAGC AAC ATCAATT CT ATT CCCATCAT CAAAACGCCT AATCAGCAAC AT CAATT CT ATT CCCAT CATCAAAACGCCT AATCAGCAAC a tcaat t ct at t cc ca t ca t caataac gcc t a a t caga a	120 120 120
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	CGACTACACTCATTTCAACACTGACTAATCAAACTTATCA CGACTACACTCATTTCAACACTGACTAATCAAACTTATCA CGACTACACTCATTTCAACACTGACTAATCAAACTTATCA cgactacactcatttcaacactgactaatcaaacttatca	160 160 160
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	TCAAACAAATAATGTTAATCCACACACAAAAGGACGAAC TCAAACAAATAATGTTAATCCACACACAAAAGGACGAAC TCAAACAATAATGTTAATCCACACACCAAAAGGACGAAC tcaaacaaataatgttaatccacacaccaaaaggacgaac	200 200 200
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	CTGAGCCCTAATAATTGTATCCCTAATTATATTATTGGC CTGAGCCCTAATAATTGTATCCCTAATTATATTTATTGGC CTGAGCCCTAATAATTGTATCCCTAATTATATTTATTGGC ctgagccctaataattgtatccctaattatttattgc	240 240 240
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	TCAACCAACCTTCTAGGGCTTCTTCCCCATACATTTACCC TCAACCAACCTTCTAGGGCTTCTTCCCCATACATTTACCC TCAACCAACCTTCTAGGGCTTCTTCCCCATACATTTACCC tcaaccaaccttctagggcttcttccccatacattaccc	280 280 280
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	CTACCACTCAGCTATCTATAAACCTAAGCATAGCCATCCC CTACCACTCAGCTATCTATAAACCTAAGCATAGCCATCCC CTACCACTCAGCTATCTATAAACCTAAGCATAGCCATCCC ctaccactcagctatctataaacctaagcatagccatccc	320 320 320
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	CCTATGAGCAGGAGCCGTAATTCTAGGCTTCCGACACAAA CCTATGAGCAGGAGCCGTAATTCTAGGCTTCCGACACAAA CCTATGAGCAGGAGCCGTAATTCTAGGCTTCCGACACAAA cctatgagcagagccgtaattctaggcttccgacacaaa	360 360 360
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	CTAAAAAATTCTTTAGCCCACTTCTTACCGCAAGGAACCC CTAAAAAATTCTTTAGCCCACTTCTTACCGCAAGGAACCC CTAAAAAATTCTTTAGCCCACTCTTACCGCAAGGAACCC ctaaaaattctttagcccacttcttaccgcaaggaaccc	$\begin{array}{c} 400 \\ 400 \\ 400 \end{array}$
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	CCATCTCACTAATTCCCATACTAATCATCATCGAAACTAT CCATCTCACTAATTCCCATACTAATCATCGATCGAAACTAT CCATCTCACTAATTCCCATACTAATCATCATCGAAACTAT ccatctcactaattcccatactaatcatcgaaactat	440 440 440
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	CAGCCTATTTATTCAACCGATAGCACTAGCAGTACGACTA CAGCCTATTTATTCAACCGATAGCACTAGCAGTACGACTA CAGCCTATTTATTCAACCGATAGCACTAGCAGTACGACTA cAGCCTATTTATTCAACCGATAGCACTAGCAGTAGCAGTA cagcctatttattcaaccgatagcactagcagtacgacta	480 480 480
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	ACAGCAAACATTACAGCAGGCCATCTATTAATGCATCTAA ACAGCAAACATTACAGCAGGCCATCTATTAATGCATCTAA ACAGCAAACATTACAGCAGGCCATCTATTAATGCATCTAA acagcaacattacagcaggccatctattaatgcatctaa	520 520 520
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	TCGGAGGAGCTACTCTAGTACTTATAGACATCAGCCCACC TCGGAGGAGCTACTCTAGTACTTATAGACATCAGCCCACC TCGGAGGAGCTACTCTAGTACTTATAGACATCAGCCCACC tcggaggagctactctagtacttatagacatcagcccacc	560 560 560
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	AACCGCTACAATTACATTTATTATTCTACTTCTACTTACA AACCGCTACAATTACATTTATTATTCTACTTCTACTTACA AACCGCTACAATTACATTTATTATTATTCTACTTCTACTTACA aaccgctacaattacatttattctacttctacttaca	600 600 600
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	GTACTTGAATTTGCCGTAGCCTTAATTCAAGCCTATGTAT GTACTTGAATTTGCCGTAGCCTTAATTCAAGCCTATGTAT GTACTTGAATTTGCCGTAGCCTTAATTCAAGCCTATGTAT gtacttgaatttgccgtagccttaattcaagcctatgtat	640 640 640
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	TCACCCTTCTAGTAAGCCTGTACCTACATGATAACACATA TCACCCTTCTAGTAAGCCTGTACCTACATGATAACACATA TCACCCTTCTAGTAAGCCTGTACCTACATGATAACACATA tcacccttctagtaagcctgtacctacatgataacacata	680 680 680
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	А А А а	681 681 681

Supplementary Material 1. Comparison of ATP6 DNA sequences in the substantia nigraamong 6Mon, 24Mon and 24Mon-TP rats. Identity=100%. (n=3 rats/group).

ORIGIN 6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	ATGCCACAACTAGACACATCCACATGATTTATTACAATCA ATGCCACAACTAGACACATCCACATGATTTATTACAATCA ATGCCACAACTAGACACATCCACATGATTTATTACAATCA atgccacaactagacacatccacatgatttattacaatca	40 40 40
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	$\label{eq:constraint} TCTCCTCAATAGCCACACTATTTATTTATTTCAATTAAA TCTCCTCAATAGCCACACTATTTATTTTAT$	80 80 80
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	$\begin{array}{l} \textbf{AATTTCTTCCCAAACCTTTCCTGCACCTCACCCAAA}\\ \textbf{AATTTCTTCCCCAAACCTTTCCTGCACCTCCCCCCAAA}\\ \textbf{AATTTCTTCCCCAAACCTTTCCTGCACCTCCCCCCCCAA}\\ \textbf{AATTTCTTCCCCAAACCTTCCCTGCACCCCCCAA}\\ \textbf{aatttcttcccaaacctttcctgcaccccccaaa}\\ \end{array}$	120 120 120
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	ACTATAGCTACAGAAAAAACGAATAACCCTTGAGAATCAA ACTATAGCTACAGAAAAAACGAATAACCCTTGAGAATCAA ACTATAGCTACAGAAAAAACGAATAACCCTTGAGAATCAA actatagctacagaaaaaacgaataacccttgagaatcaa	160 160 160
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	AATGAACGAAAATCTATTTGCCTCTTTCATTACCCCCACA AATGAACGAAAATCTATTTGCCTCTTTCATTACCCCCACA AATGAACGAAAATCTATTTGCCTCTTTCATTACCCCCACA aatgaacgaaaatctatttgcctctttcattacccccaca	200 200 200
6Mon.seq 24Mon.seq 24Mon-TP.seq Consensus	ATAA ATAA ATAA ataa	204 204 204

Supplementary Material 2. Comparison of ATP8 DNA sequences in the substantia nigra among 6Mon, 24Mon and 24Mon-TP rats. Identity=100%. (n=3 rats/group).