

**Extended data Figure 4-3: MtDNA deletions and mutations increase when endogenous Parkin is lost in PD-mito-Pstl mice striata.** Statistical analyses for qPCR performed on DNA from striatum and midbrain at 4, 12 and 19 months. p value and Degree of freedom (DF) after one-way ANOVA analysis and Tukey's multiple comparison test

<b>Brain region Age qPCR</b>	Midbr 4m ND1	Midbr 4m COXI	Midbr 4m ND4	Midbr 12m COXI	Midbr 19m COXI	Midbr 12m ND4	Midbr 19m ND4	Str 12m COXI	Str 19m COXI	Str 12m ND4	Str 19m ND4
	<b>DF 12</b>	<b>DF 11</b>	<b>DF 11</b>	<b>DF 11</b>	<b>DF 10</b>	<b>DF 11</b>	<b>DF 10</b>	<b>DF 12</b>	<b>DF 11</b>	<b>DF 12</b>	<b>DF 11</b>
Cntrl vs. PD-mito-Pstl	0.6826	0.9979	0.9993	0.9997	0.9998	0.9993	0.692	0.7083	0.7807	0.0734	0.1345
Cntrl vs. ParkKO	0.0287	0.5954	0.9989	0.9402	0.9957	0.9989	0.7079	0.398	0.4901	0.6554	0.5783
Cntrl vs. ParkKO-PD-mitoPstl	0.0009	0.0100	0.9952	0.9995	0.8585	0.9952	0.4616	0.6299	0.9517	0.387	0.6015
PD-mito-Pstl vs. ParkKO	0.2027	0.7019	0.9931	0.9617	0.999	0.9931	0.2337	0.1392	0.0975	0.2197	0.6496
PD-mito-Pstl vs. ParkKO-PD-mitoPstl	0.0070	0.0148	0.9995	>0.9999	0.9122	0.9995	0.9902	0.9984	0.9666	0.3919	0.6244
ParkKO vs. ParkKO-PD-mitoPstl	0.3609	0.1351	0.9812	0.966	0.9564	0.9812	0.1222	0.1207	0.1989	0.9264	>0.9999

<b>Brain Region qPCRs</b>	Midbr Pstde/Coxl	Str Pstde/Coxl
	<b>DF 9</b>	<b>DF 11</b>
PD-mito-Pstl12m vs. ParkKO-PD-mitoPstl 12m	0.9991	0.9306
PD-mito-Pstl12m vs. PD-mito-Pstl 19m	0.914	0.9659
PD-mito-Pstl12m vs. ParkKO-PD-mitoPstl 19m	0.9904	0.8904
ParkKO-PD-mitoPstl 12m vs. PD-mito-Pstl 19m	0.8616	0.6714
ParkKO-PD-mitoPstl 12m vs. ParkKO-PD-mitoPstl 19m	0.9986	0.5165
PD-mito-Pstl19m vs. ParkKO-PD-mitoPstl 19m	0.76	0.9927