PARAMETERS	METHOD	MOLECULAR MARKER	ASSAY SUMMARY	MATERIALS
Cell viability and rate of death	Flow cytometry	Phosphatydilserine *(Annexin V)* DNA *(7AAD)*	Annexin V is measured via PE channel (585-42 nm) and 7AAD is measured via PC5.5 (690-50 nm)	*PE annexin V Apoptosis Detection Kit (BD Pharmingen)*
Cell cycle	Flow cytometry	BrDU *(anti APC-BrDU)* DNA *(7AAD)*	Anti-BrDU fluorophore is measured via APC channel (660-20 nm) and 7AAD is measured via PC5.5 (690-50 nm)	*APC BrdU Flow kit (BD Pharmingen)*
Mitochondrial levels	Flow cytometry	Mitochondrial mass	Live cells are stained with a dye that accumulates in the mitochondria, then measured via FITC channel (516 nm).	*MitoTracker Green FM (Invitrogen)*
Autophagy rate levels	Flow cytometry	Monodansyl cadaverine (MDC)	MDC is marked with a fluorophore and then measured via FITC channel (525-40 nm) Rapamycin is used as a positive control.	*Autophagy Assay Kit ab139484 (Abcam)*
	Western Blot	LC3B	Proteins extracts are obtained with lysis buffer and separated by electrophoresis. Samples are transferred to a PVDF membraned and incubated with antibody. Visualisation is performed using ECL at 16 kDa	*3868 (Cell Signaling Technology)*
	Quantitative Real Time PCR	*MAP1LC3B* *MFN2* *PINK1* *ULK1*	cDNA samples were obtained from mRNA by retrotranscription, amplified real time PCR and analysed using the $2^{-\Delta\Delta CT}$ method (RT-qPCR).	*Hs00917682_m1* *Hs00208382_m1* *Hs00260868_m1* *Hs00177504_m1* *(ThermoFisher)*
Oxidative mitochondrial state	Flow cytometry	Superoxide radicals in the mitochondria	MitoSOX Red oxidises with mitochondrial superoxide and the fluorescence is measured via ECD channel (610 nm).	*MitoSOX (Invitrogen)*
	Western Blot	Mn-SOD (SOD2)	Proteins extracts are obtained with lysis buffer and separated by electrophoresis. Samples are transferred to a PVDF membraned and incubated with antibody. Visualisation is performed using ECL at 22 kDa	*06-984 (Merck)*

	Quantitative Real Time PCR	*SOD1* *SOD2* *NFE2L2* *G6PD*	RT-qPCR, as before	*Hs00167309_m1* *Hs00167309_m1* *Hs00232352_m1* *Hs00166169_m1* *(ThermoFisher)*
Cell hydrogen peroxide levels and antioxidants	Flow cytometry	H_2O_2	Cells are stained prior to treatment and then measured via Pacific Blue channel (450 nm)	*Cell Meter Intracellular Fluorimetric Hydrogen Peroxide* *(AAT Bioquest)*
	Quantitative Real Time PCR	*CAT* *GPX1* *PRDX1* *PRDX4* *PRDX5* *TXN* *TXN2*	RT-qPCR, as before	*Hs00156308_m1* *Hs00829989_gH* *Hs00602020_mH* *Hs01056076_m1* *Hs00201536_m1* *Hs00828652_m1* *Hs00429399_g1* *(ThermoFisher)*
Mitochondrial homeostasis and energy production	Quantitative Real Time PCR	*ATP5B* *MYC* *POLRMT* *TFAM* *TFB1M*	RT-qPCR, as before	*Hs00969569_m1* *Hs00153408_m1* *Hs04187596_g1* *Hs01082775_m1* *Hs01084404_m1* *(ThermoFisher)*
	SeaHorse	Complex I *(Rotenone)* Complex III *(Antimycin A)* Complex V *(Oligomycin)* Proton gradient in mitochondrial membranes *(FCCP)*	Cells are treated with modulators of respiration at different time points to measure different aspects of mitochondrial performance	*Agilent SeaHorse*
	Western Blot	Electron Transport Chain (Complex I to V)	Proteins extracts are obtained with lysis buffer and separated by electrophoresis. Samples are transferred to a PVDF membraned and incubated with antibody. Visualisation is performed via fluorescence from 10 to 50 kDa	*OXPHOS* *45-8199 (Invitrogen)*