

Supplementary Materials to:

α -Synuclein A53T Promotes Mitochondrial Proton Gradient Dissipation and Depletion of the Organelle Respiratory Reserve in a Neuroblastoma Cell Line

Pierpaolo Risiglione ¹, Salvatore Antonio Maria Cubisino ¹, Cristiana Lucia Rita Lipari ¹, Vito De Pinto ^{1,2}, Angela Messina ^{2,3*}, and Andrea Magri ^{2,3*}

¹ Department of Biomedical and Biotechnological Sciences, University of Catania, Via S. Sofia 64, 95125 Catania, Italy; pierpaolo.risiglione@phd.unict.it (P.R.); salvatore.cubisino@phd.unict.it (S.A.M.C.); cristiana.lipari@phd.unict.it (C.L.R.L.); vdpbiofa@unict.it (V.D.P.)

² we.MitoBiotech S.R.L., Corso Italia 172, 95125 Catania, Italy

³ Department of Biological, Geological and Environmental Sciences, University of Catania, Via S. Sofia 64, 95125 Catania, Italy

* Correspondence: mess@unict.it (Angela Messina); andrea.magri@unict.it (Andrea Magri)

Sequence	
Cloning megaprimer FW	5'-ttcaattacagctcttaaggctagagtactATGGATGTATTCATGAAAGG-3'
Cloning megaprimer REV	5'-acgagcataaatctggaacatcatatggataGGCTTCAGGTCGTAGTCTT-3'
Mutagenesis A53T FW	5'-GTGGTGCATGGTGTGACAACAGTGGCTGAGAAG-3'
Mutagenesis A53T REV	5'-CTTCTCAGCCACTGTTGTCACACCATGCACCAC-3'

Table S1 List of primers used in this work for PCR cloning and mutagenesis.

	pCMS	α -Syn WT	α -Syn A53T
ROUTINE	19.55 \pm 2.81	19.89 \pm 3.58	16.90 \pm 2.62
LEAK	8.19 \pm 1.70	6.60 \pm 0.82	7.67 \pm 1.40
OXPHOS (Complex I)	21.81 \pm 3.80	21.30 \pm 2.63	19.04 \pm 2.72
OXPHOS (Complex I + II)	43.25 \pm 4.70	41.24 \pm 3.14	38.31 \pm 5.88
ET capacity	47.34 \pm 6.18	44.58 \pm 2.99	40.30 \pm 5.91
ET capacity (complex II)	19.12 \pm 2.44	18.05 \pm 1.55	20.04 \pm 1.90

Table S2 Raw data of oxygen consumption of transformed cells in different respiratory states. Data are expressed as pmol/sec per million cells and reported as a mean \pm standard deviation of n=6 independent experiments.