

## Supplementary Tables

**Supplementary Table I:** Gene expression of subunits of mitochondrial complexes in the mediodorsal thalamus in FFI and control cases normalized with XPNPEP1.

Thalamus	Probe	Control	FFI	P value	
Complex I	<i>NDUFA2</i>	1.02 ± 0.20	0.79 ± 0.17	0.06	-
	<i>NDUFA7</i>	1.02 ± 0.20	0.91 ± 0.34	0.50	-
	<i>NDUFA10</i>	1.00 ± 0.10	0.96 ± 0.13	0.49	-
	<i>NDUFB3</i>	1.02 ± 0.22	0.82 ± 0.15	0.10	-
	<i>NDUFB7</i>	1.02 ± 0.2	0.87 ± 0.26	0.31	-
	<i>NDUFB10</i>	1.02 ± 0.21	0.89 ± 0.23	0.34	-
	<i>NDUFS7</i>	1.02 ± 0.22	0.91 ± 0.20	0.37	-
	<i>NDUFS8</i>	1.01 ± 0.19	0.95 ± 0.41	0.73	-
Complex II	<i>SDHB</i>	1.03 ± 0.24	0.87 ± 0.17	0.21	-
Complex III	<i>UQCR11</i>	1.03 ± 0.26	0.94 ± 0.19	0.50	-
	<i>UQCRB</i>	1.06 ± 0.38	0.78 ± 0.31	0.20	-
Complex IV	<i>COX7A2L</i>	1.03 ± 0.27	0.87 ± 0.15	0.25	-
	<i>COX7C</i>	1.05 ± 0.37	1.01 ± 0.20	0.81	-
Complex V	<i>ATP5D</i>	1.02 ± 0.22	0.63 ± 0.08	0.004	**
	<i>ATP5G2</i>	1.01 ± 0.13	1.36 ± 0.48	0.09	-
	<i>ATP5H</i>	1.02 ± 0.21	0.85 ± 0.20	0.18	-
	<i>ATP5L</i>	1.01 ± 0.19	0.98 ± 0.20	0.76	-
	<i>ATP5O</i>	1.02 ± 0.19	0.80 ± 0.19	0.09	-
	<i>ATP6V0B</i>	1.06 ± 0.39	0.87 ± 0.15	0.34	-
	<i>ATP6V1H1</i>	1.13 ± 0.64	0.73 ± 0.13	0.21	-
	<i>TOMM40</i>	1.03 ± 0.25	0.80 ± 0.12	0.08	-

**Supplementary Table II:** Densitometric values of expression of mitochondrial proteins as revealed by western blotting in the mediodorsal thalamus in FFI cases and controls normalized with  $\beta$ -actin (A) and VDAC (B).

**A**

Protein	Control	FFI	P value	
NDUFB8	0.62 $\pm$ 0.12	0.44 $\pm$ 0.11	0.0257	*
SDHB	0.87 $\pm$ 0.11	0.65 $\pm$ 0.18	0.0426	*
UQCRB	1.87 $\pm$ 0.21	1.70 $\pm$ 0.36	0.34	-
UQCRC2	0.49 $\pm$ 0.09	0.38 $\pm$ 0.09	0.0462	*
COX2	0.77 $\pm$ 0.14	0.54 $\pm$ 0.09	0.0071	**
ATP5A	0.89 $\pm$ 0.05	0.85 $\pm$ 0.19	0.69	-
ATP5O	0.78 $\pm$ 0.20	0.52 $\pm$ 0.07	0.0227	*

**B**

Protein	Control	FFI	P value	
NDUFB8	0.77 $\pm$ 0.06	0.52 $\pm$ 0.12	0.0087	**
SDHB	1.10 $\pm$ 0.13	0.79 $\pm$ 0.15	0.0035	**
UQCRB	0.94 $\pm$ 0.16	0.88 $\pm$ 0.18	0.61	-
UQCRC2	0.62 $\pm$ 0.07	0.44 $\pm$ 0.07	0.0022	**
COX2	0.94 $\pm$ 0.06	0.58 $\pm$ 0.04	0.0001	****
ATP5A	1.21 $\pm$ 0.04	1.02 $\pm$ 0.23	0.08	-
ATP5O	1.08 $\pm$ 0.23	0.78 $\pm$ 0.22	0.09	-

**Supplementary Table III:** Gene expression of nucleolar proteins, 18S and 28S rRNAs and ribosomal proteins in the mediodorsal thalamus in FFI and control cases normalized with XPNPEP1.

Genes encoding for	Probe	Control	FFI	P Value	
Nucleolar proteins	<i>UBTF</i>	1.00 ± 0.05	0.88 ± 0.12	0.09	-
	<i>NCL</i>	1.01 ± 0.17	1.05 ± 0.12	0.69	-
	<i>NPM1</i>	1.01 ± 0.14	1.36 ± 0.31	0.027	*
rRNAs	<i>rRNA18S</i>	1.01 ± 0.19	1.30 ± 0.46	0.24	-
	<i>rRNA28S</i>	1.12 ± 0.56	2.93 ± 1.64	0.0287	*
Ribosomal proteins	<i>RPL5</i>	1.01 ± 0.14	1.17 ± 0.15	0.09	-
	<i>RPL7</i>	1.03 ± 0.25	1.27 ± 0.11	0.13	-
	<i>RPL21</i>	1.05 ± 0.34	0.87 ± 0.37	0.40	-
	<i>RPL22</i>	1.00 ± 0.09	1.48 ± 0.56	0.09	-
	<i>RPL23A</i>	1.03 ± 0.27	1.14 ± 0.10	0.42	-
	<i>RPL26</i>	1.03 ± 0.27	0.80 ± 0.44	0.13	-
	<i>RPL27</i>	1.03 ± 0.25	1.44 ± 0.46	0.09	-
	<i>RPL30</i>	1.03 ± 0.27	1.33 ± 0.22	0.08	-
	<i>RPL31</i>	1.03 ± 0.30	1.23 ± 0.15	0.21	-
	<i>RPS3A</i>	1.02 ± 0.22	1.20 ± 0.21	0.19	-
	<i>RPS5</i>	1.01 ± 0.19	1.55 ± 0.63	0.07	-
	<i>RPS6</i>	1.00 ± 0.04	1.53 ± 0.59	0.08	-
	<i>RPS10</i>	1.01 ± 0.12	1.04 ± 0.15	0.66	-
<i>RPS13</i>	1.02 ± 0.22	1.17 ± 0.16	0.24	-	
<i>RPS17</i>	1.01 ± 0.13	1.28 ± 0.18	0.016	*	
<i>RPS20</i>	1.02 ± 0.22	1.65 ± 0.51	0.0295	*	

**Supplementary Table IV:** Densitometric values of expression of initiation and elongation factors of protein transcription in the mediodorsal thalamus in FFI cases and controls normalized with  $\beta$ -actin

Protein	Control	FFI	P value	
NCL	1.60 $\pm$ 0.33	1.04 $\pm$ 0.34	0.012	*
eIF2 $\alpha$	1.16 $\pm$ 0.22	0.95 $\pm$ 0.14	0.06	-
P- eIF2 $\alpha$	1.90 $\pm$ 0.65	1.35 $\pm$ 0.53	0.13	-
eIF5	2.12 $\pm$ 0.95	2.33 $\pm$ 1.08	0.72	-
eEF1A	2.07 $\pm$ 0.17	1.59 $\pm$ 0.44	0.021	*
eEF2	1.17 $\pm$ 0.22	1.18 $\pm$ 0.30	0.91	-