

**Supplementary Table 1.** Percentage of stationary mitochondria in different experiments of this study ( $\pm$  SEM).

<b>Figure 1</b>	<i>Control</i>	<i>Afg3l2 (A)</i>		
	60.5 $\pm$ 2.8	71.9 $\pm$ 7.8		
<b>Figure 2</b>	<i>Control in OMA1<sup>-/-</sup> neurons</i>	<i>Afg3l2 in OMA1<sup>-/-</sup> neurons</i>		
	70.0 $\pm$ 4.4	80.5 $\pm$ 2.6		
<b>Figure 5</b>	<i>Control</i>	<i>Mapt</i>	<i>Afg3l2 + control</i>	<i>Afg3l2 + Mapt</i>
	69.6 $\pm$ 2.2	64.8 $\pm$ 1.2	74.4 $\pm$ 4.0	74.2 $\pm$ 1.0
<b>Figure 6</b>	<i>Control</i>	<i>Control + NAC</i>	<i>Afg3l2</i>	<i>Afg3l2 + NAC</i>
	69.7 $\pm$ 0.4	60.6 $\pm$ 1.6	83.9 $\pm$ 1.27	63.4 $\pm$ 2.3
<b>Figure 7</b>	<i>Control</i>	<i>Control + Vit E</i>	<i>Afg3l2</i>	<i>Afg3l2 + Vit E</i>
	76.0 $\pm$ 2.6	70.0 $\pm$ 2.9	80.1 $\pm$ 4.0	75.1 $\pm$ 1.72
<b>Figure S1</b>	<i>Control</i>	<i>Afg3l2 (B)</i>	<i>Afg3l2 (C)</i>	
	60.7 $\pm$ 3.4	73.5 $\pm$ 2.8 ( $p= 0.04$ )	75.0 $\pm$ 1.1 ( $p=0.01$ )	
<b>Figure S3</b>	<i>Control</i>	<i>OPA1 (A)</i>	<i>OPA1 (B)</i>	
	71.1 $\pm$ 3.0	69.0 $\pm$ 3.6	72.9 $\pm$ 3.2	

$p$  value was determined with Student's t-test and is shown only when significant.