

# **Supplementary Western blotting data**

## **Parkinson's disease mutant Miro1 causes mitochondrial dysfunction and dopaminergic neuron loss**

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## Supplementary Western blotting data

Normal exposure

Ctrl1 PD-R272Q iCtrl Ctrl1 PD-R272Q iCtrl



α-syn 15 kDa

Ctrl1 PD-R272Q iCtrl Ctrl1 PD-R272Q iCtrl

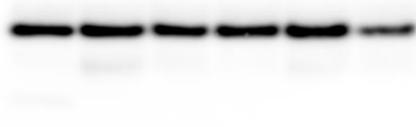
β-actin 42 kDa

High exposure

Ctrl1 PD-R272Q iCtrl Ctrl1 PD-R272Q iCtrl



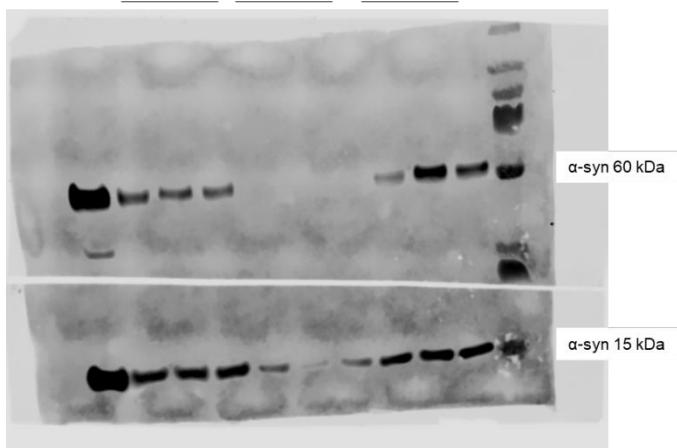
α-syn 15 kDa



β-actin 42 kDa

**WB1.** Original full length membrane referent to the data displayed at Main Figure 4B. Left:  $\alpha$ -synuclein normal (top) and high (bottom) exposures. Right: full membrane showing  $\beta$ -actin.

3x SNCA PD-R272Q iCtrl Ctrl1



$\alpha$ -syn 60 kDa

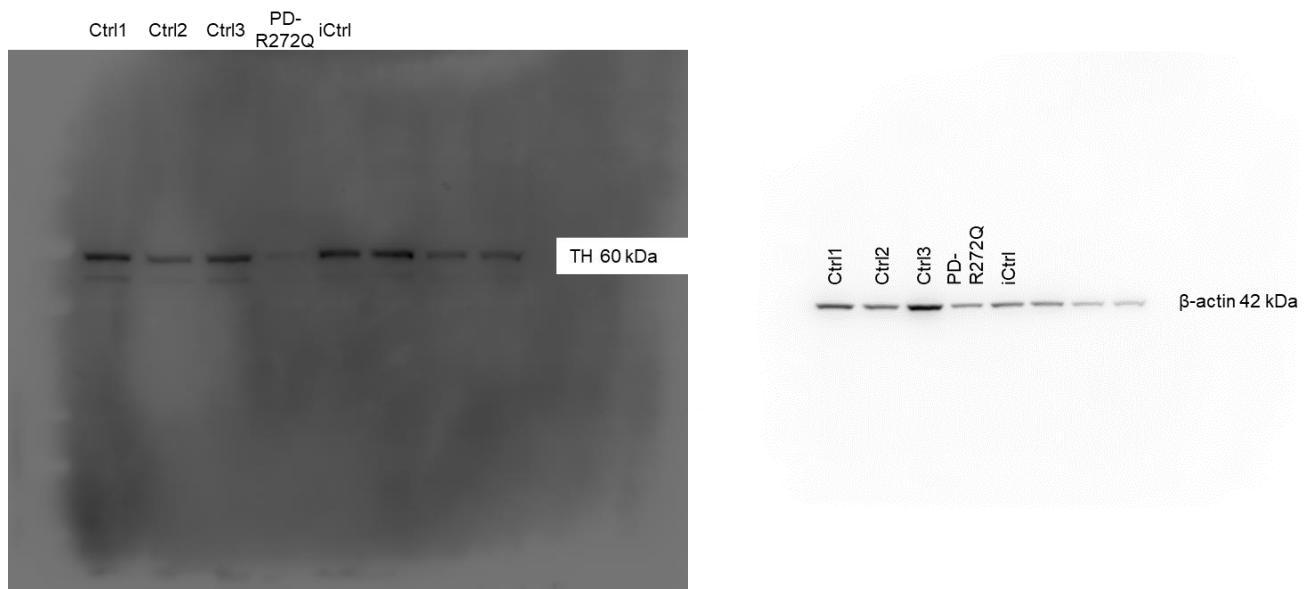
$\alpha$ -syn 15 kDa

3x SNCA PD-R272Q iCtrl Ctrl1

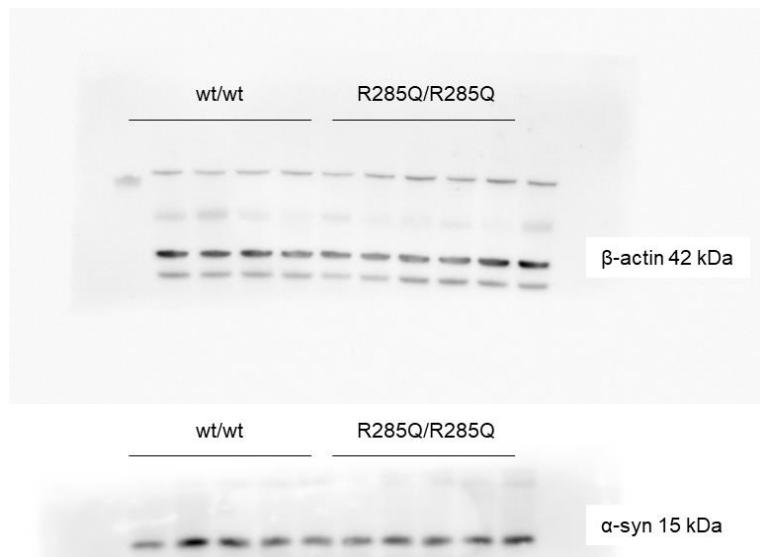


Vinculin 130 kDa

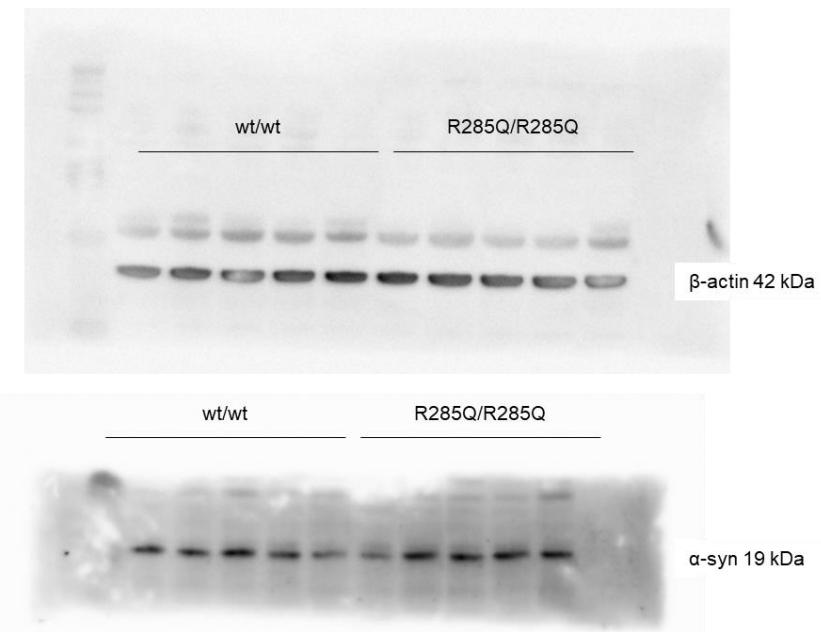
**WB2.** Original membrane shown at Main Figure 4F, blotted for  $\alpha$ -synuclein (left) and Vinculin (right).



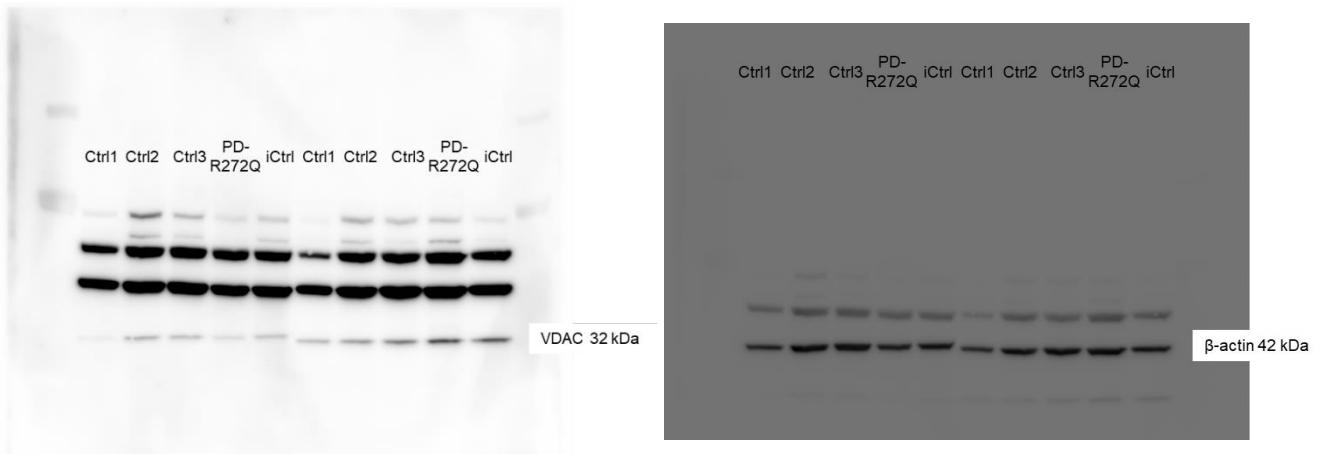
**WB3.** Original membrane shown at Main Figure 5A, blotted for tyrosine hydroxylase (TH, left) and  $\beta$ -actin (right).



**WB4.** Original membrane shown at Main Figure 6E, blotted for  $\beta$ -actin (top) and  $\alpha$ -synuclein ( $\alpha$ -syn, bottom).



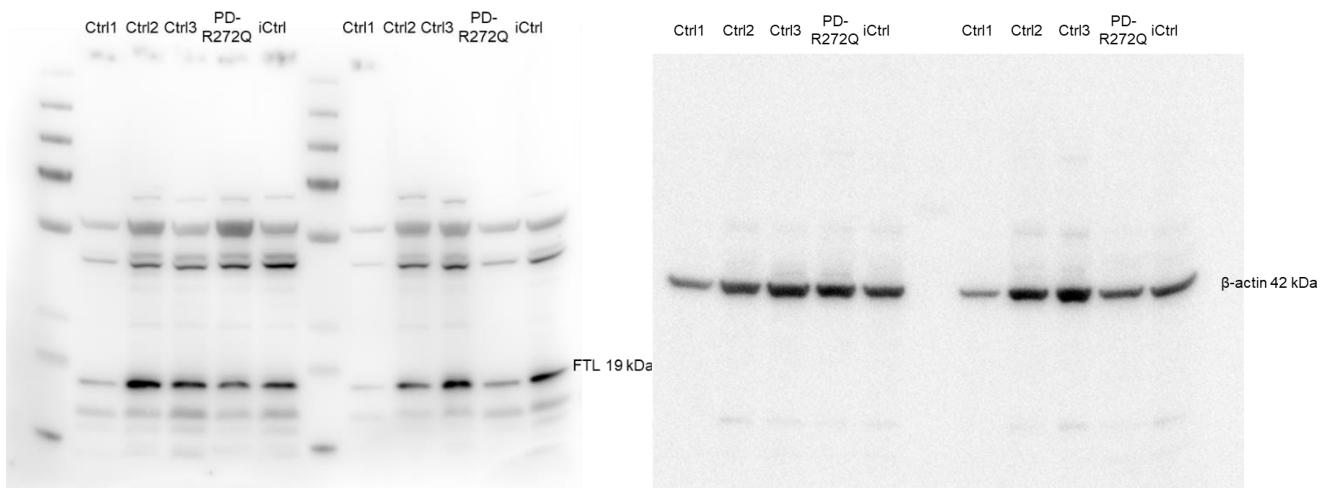
**WB5.** Original membrane shown at Main Figure 6F, blotted for  $\beta$ -actin (top) and phosphorylated S129  $\alpha$ -synuclein ( $\alpha$ -syn, bottom).



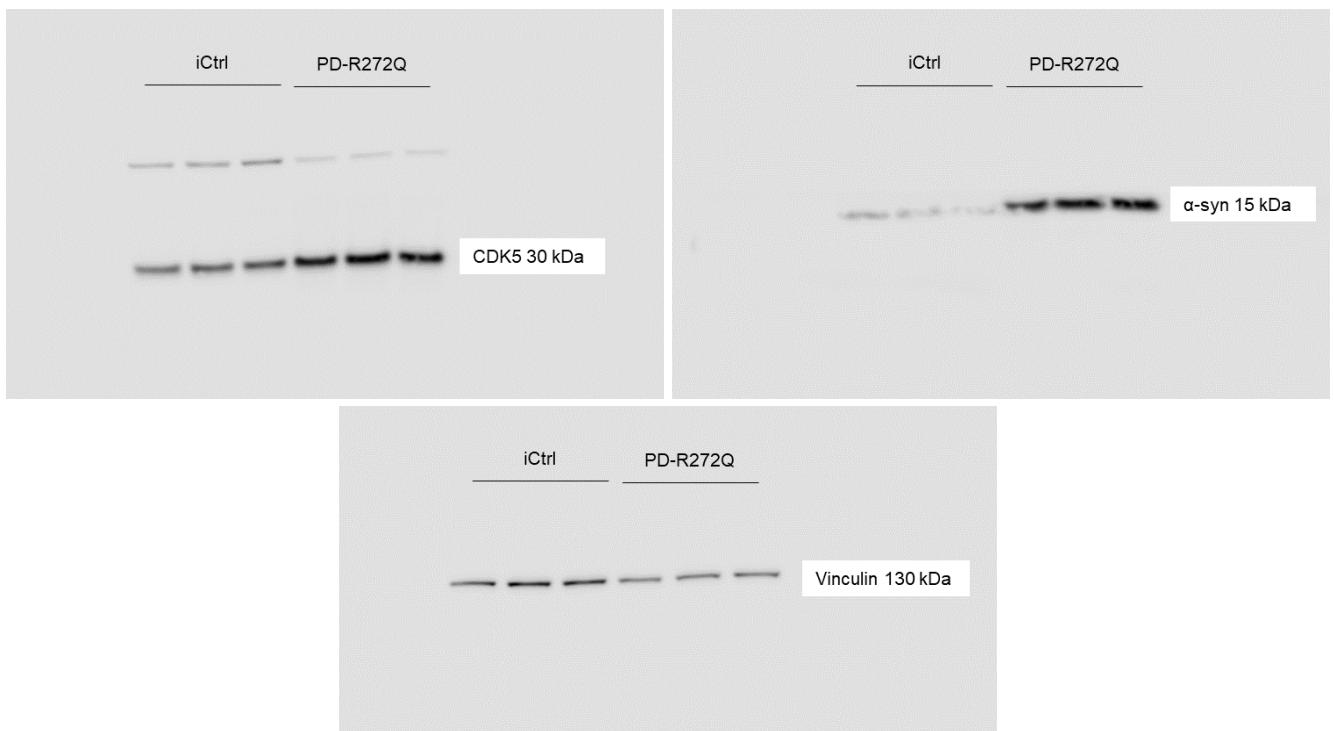
**WB6.** Original membrane shown at Supplementary Figure 4B, blotted for VDAC (left) and  $\beta$ -actin (right).



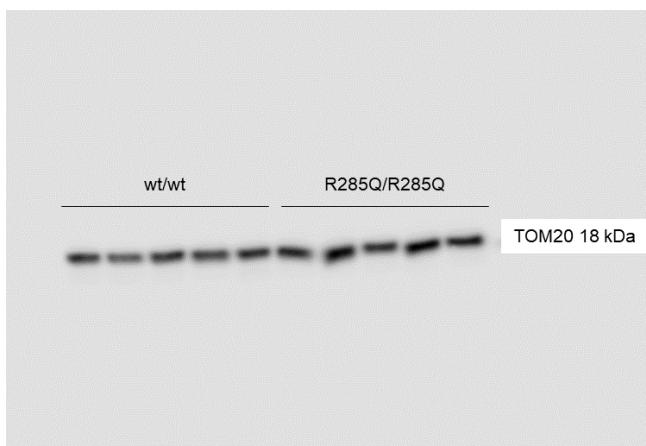
**WB7.** Original membrane shown at Supplementary Figure 4C, blotted for TOM20 (right) and  $\beta$ -actin (left).



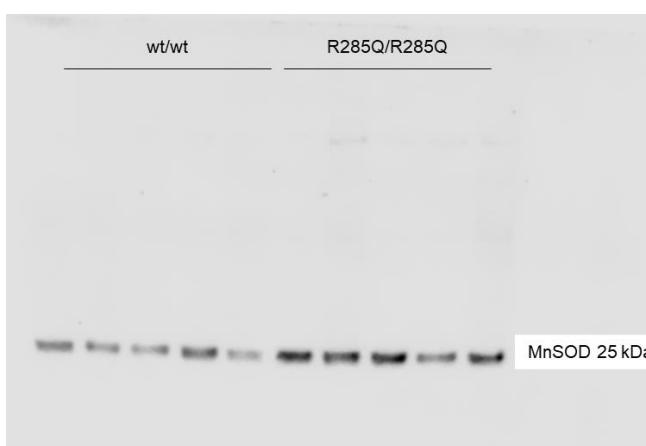
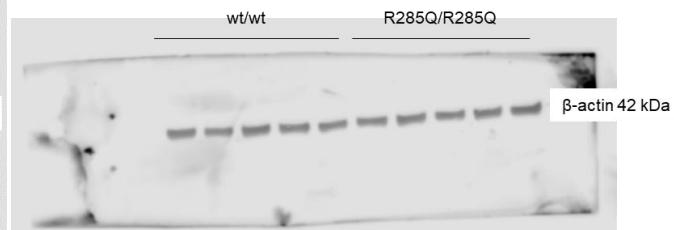
**WB8.** Original membrane shown at Supplementary Figure 4D, blotted for FTL (left) and  $\beta$ -actin (right).



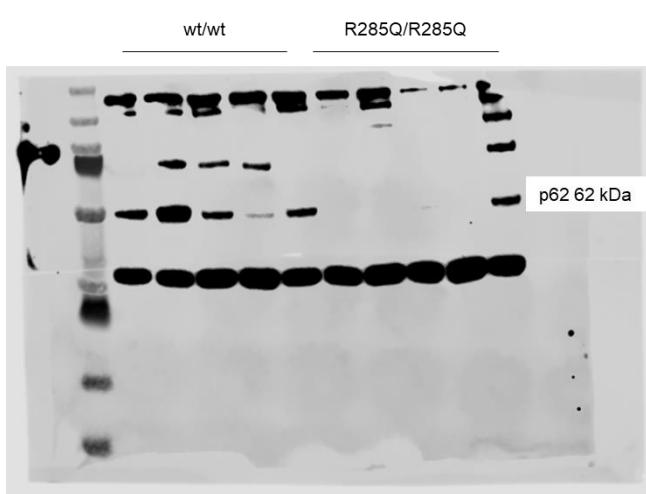
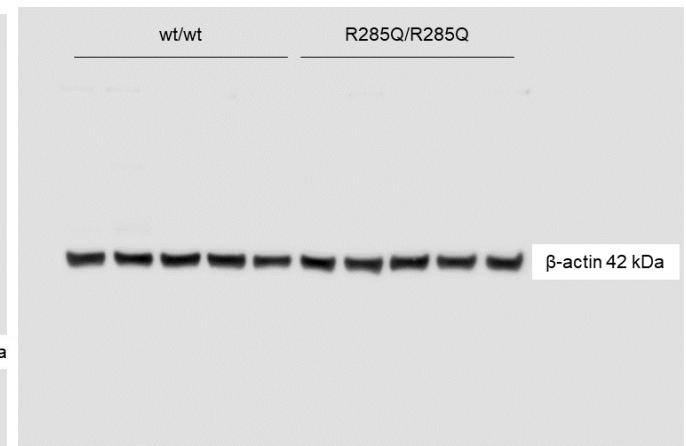
**WB9.** Original membrane shown at Supplementary Figure 6E, blotted for CDK5 (top left),  $\alpha$ -synuclein (top right) and vinculin (bottom).



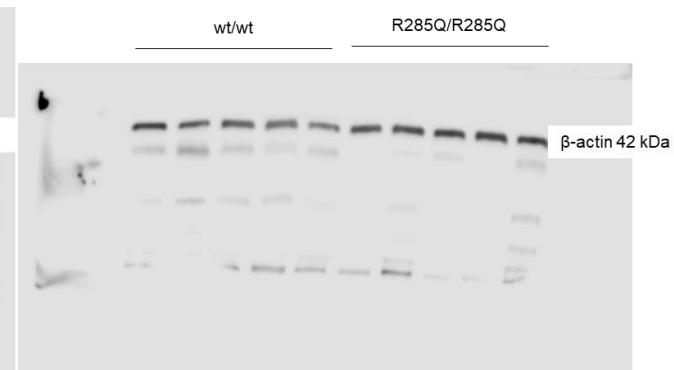
**WB10.** Original membrane shown at Supplementary Figure 9C, blotted for TOM20 (left) and  $\beta$ -actin (right).

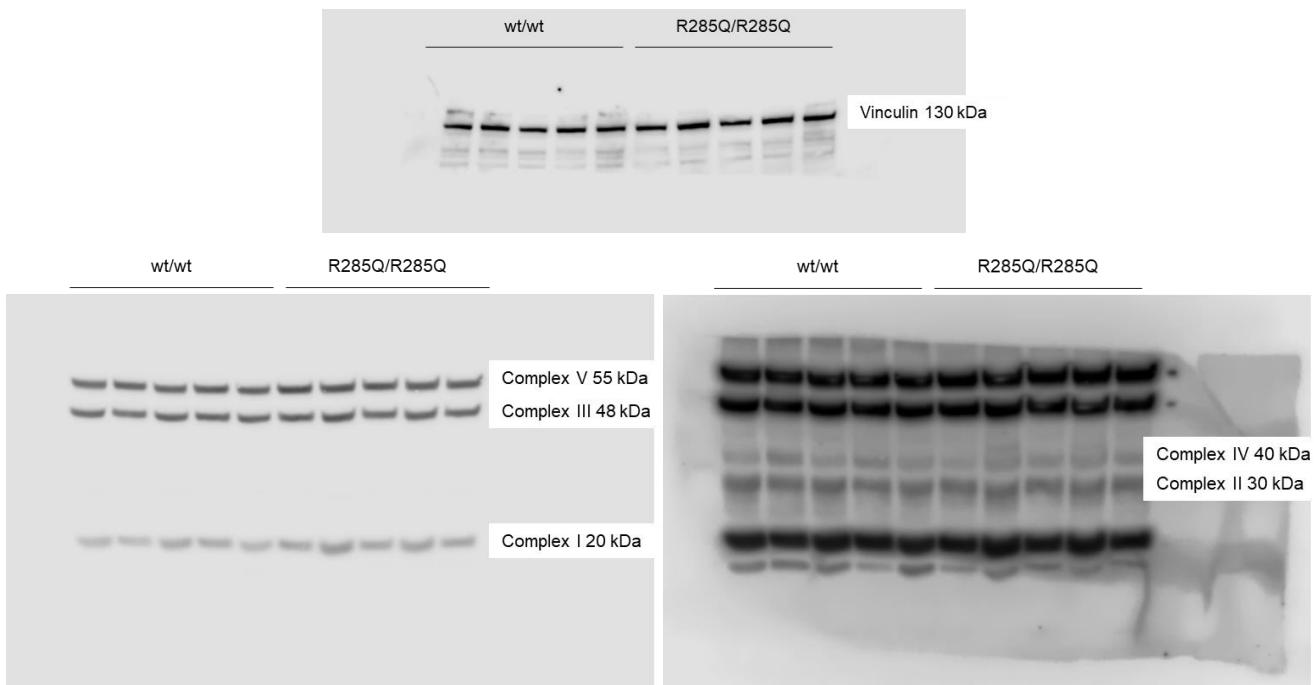


**WB11.** Original membrane shown at Supplementary Figure 9D, blotted for MnSOD (left) and  $\beta$ -actin (right).



**WB12.** Original membrane shown at Supplementary Figure 9E, blotted for p62 (left) and  $\beta$ -actin (right).





**WB13.** Original membrane shown at Supplementary Figure 9F, blotted for Vinculin (top) and mitochondrial complex V, III, and I (bottom left) as well as mitochondrial complex IV and II (bottom right).