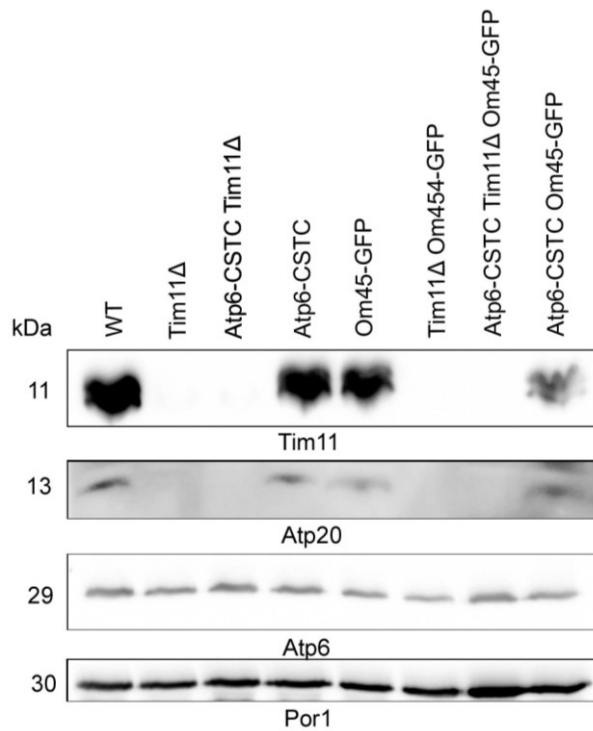


Supplemental Material

ATP Synthase Subunit *a* Supports Permeability Transition in Yeast Lacking Dimerization Subunits and Modulates *y*PTP Conductance

Katarzyna Niedzwiecka Emilia Baranowska Chiranjit Panja Roza Kucharczyk

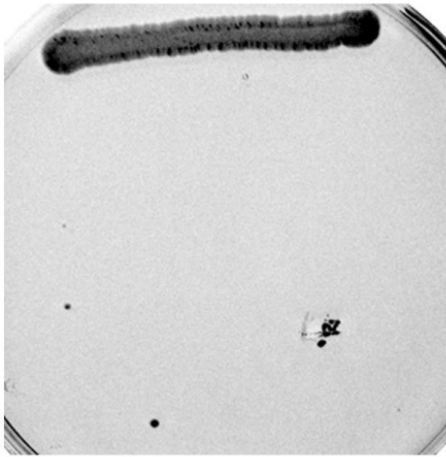
Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw, Poland



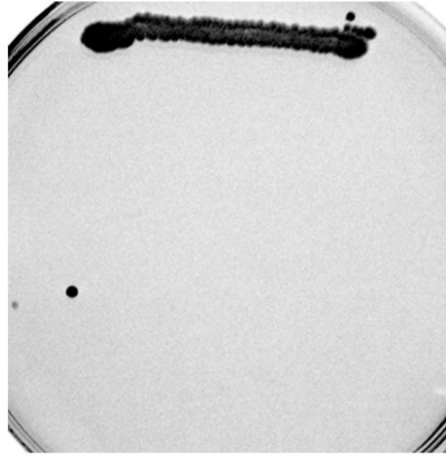
1

2 **Figure S1. Verification of the absence of subunits e and g (Atp20) and the**
 3 **accumulation of ATP synthase assembled complexes (Atp6) by Western**
 4 **blotting in analyzed strains.** Forty micrograms of mitochondrial protein was loaded
 5 on SDS-PAGE and transferred onto a nitrocellulose membrane. The indicated
 6 proteins were detected by specific antibodies. Representative blots are shown.

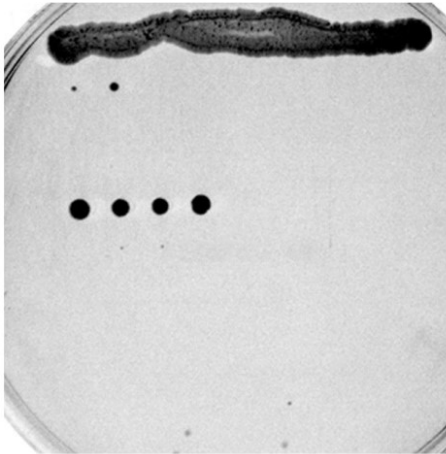
tim11Δ x TIM11 [atp6-P163S]



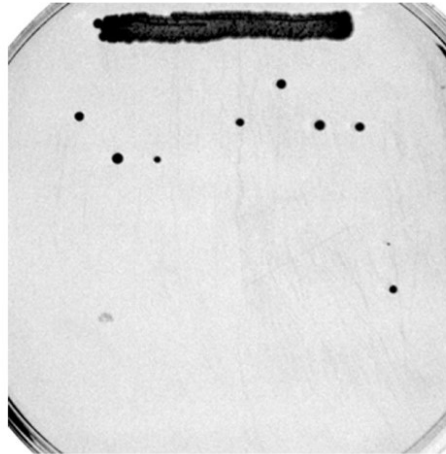
tim11Δ x TIM11 OM45-GFP [atp6-P163S]



tim11Δ x TIM11 [atp6-K90E]



tim11Δ x TIM11 OM45-GFP [atp6-K90E]

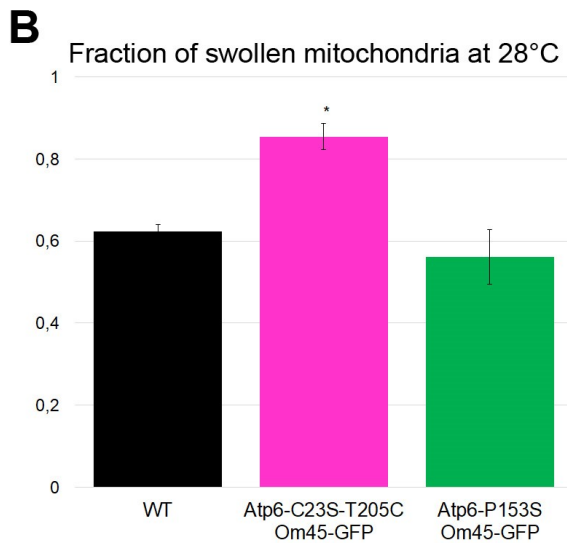
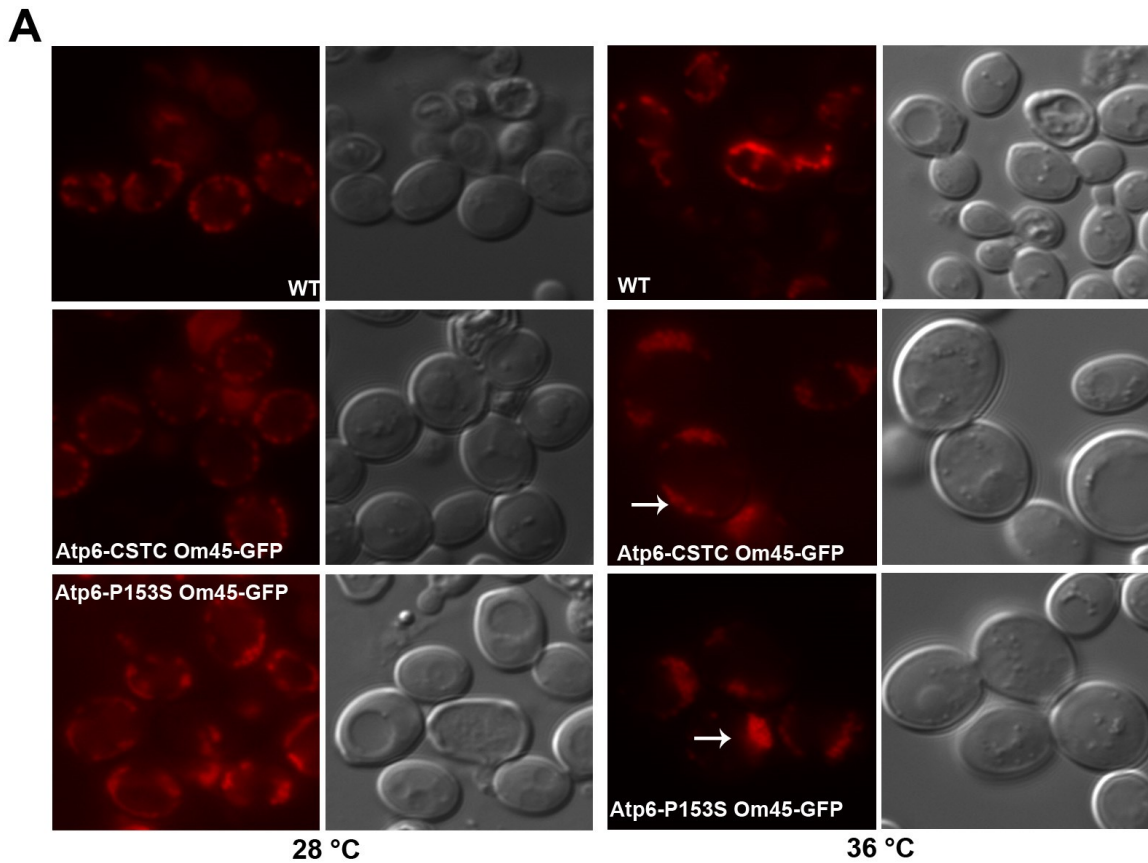


7

8 **Figure S2. Dissection plates of crossings of the *tim11::HphNTI* [ρ^0] strain with**

9 **the single mutants *atp6-P163S* and *atp6-K90E* and double mutants *atp6-P163S***

10 ***OM45-GFP* and *atp6-K90E OM45-GFP*. Representative plates are shown.**



11

12 **Figure S3. Atp6-P153S Om45-GFP cells have an aggregated mitochondrial**
 13 **network as Atp6-CSTC Om45-GFP cells but their mitochondria swell as the**
 14 **control mitochondria. A)** Cells bearing plasmids expressing RFP fused to the
 15 mitochondrial targeting sequence were grown at 28 or 36 °C in liquid W0-GaIA
 16 without leucine to an OD of 1 and immediately viewed by fluorescence microscopy.
 17 **B)** Swelling of mitochondria isolated from cells grown at 28 °C (see legend to Fig.
 18 6B). Statistical significance is indicated.

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