

# Fibroblasts of Machado Joseph Disease patients reveal autophagy impairment

Isabel Onofre<sup>1,2¶</sup>, Nuno Mendonça<sup>1,3,4¶</sup>, Sara Lopes<sup>1,5</sup>, Rui Nobre<sup>1,5</sup>, Joana Barbosa de Melo<sup>1,4,6</sup>, Isabel Marques Carreira<sup>1,4,6</sup> Cristina Januário<sup>3,4</sup> António Freire Gonçalves<sup>3,4</sup> and Luis Pereira de Almeida<sup>1,2</sup>

1- CNC - Center for Neuroscience and Cell Biology, Coimbra, Portugal

2- Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal

3- Neurology Department, Coimbra University Hospital Center, Coimbra, Portugal

4- Faculty of Medicine, University of Coimbra, Portugal

5- IIIUC- Institute for Interdisciplinary Research, University of Coimbra, Coimbra, Portugal

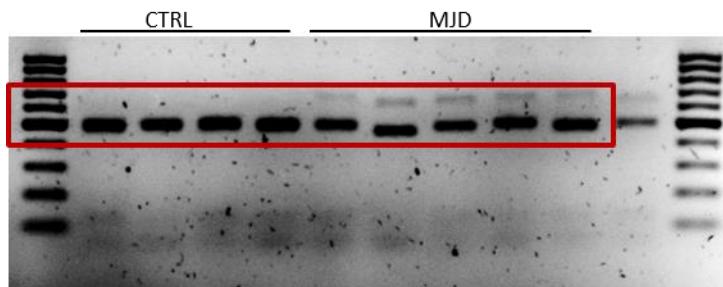
6-*Cytogenetics and Genomics Laboratory, Faculty of Medicine, University of Coimbra, Coimbra, Portugal*

¶ - Equal contribution

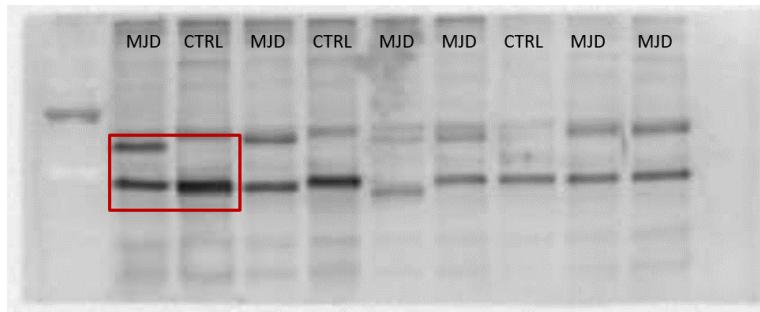
Corresponding author:

Luis Pereira de Almeida ([luispa@cnc.uc.pt](mailto:luispa@cnc.uc.pt))

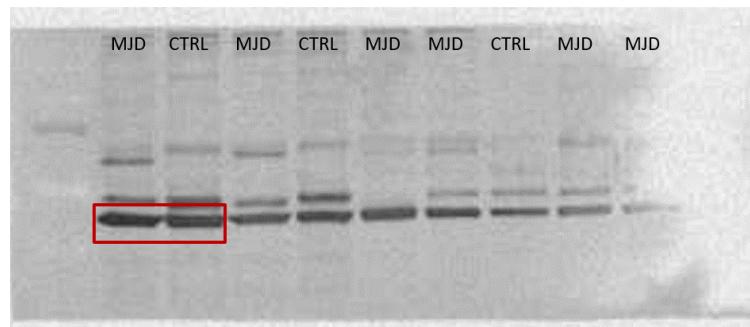
## Supplemental Information



Agarose gel  
Ataxin-3



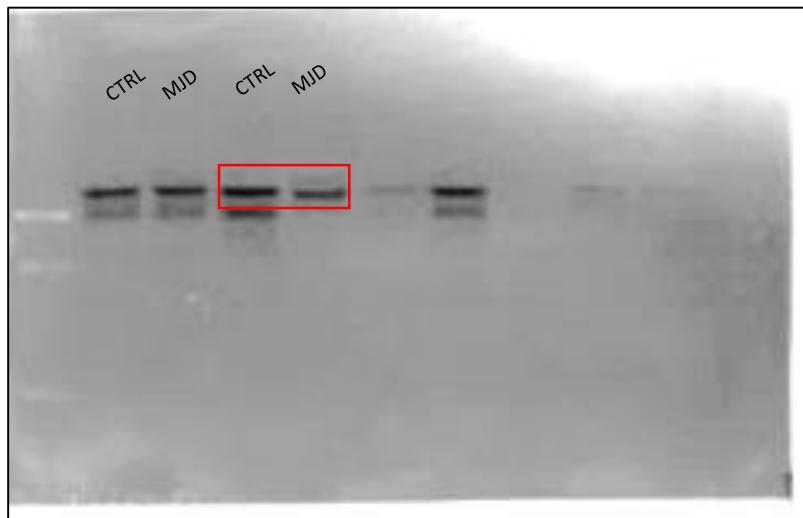
Western blot  
membrane  
Ataxin-3



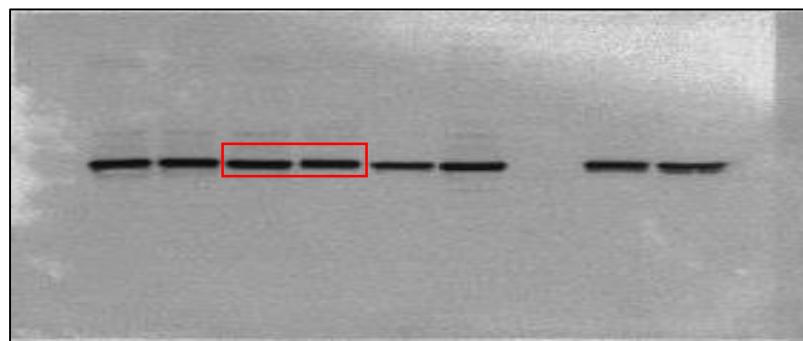
Western blot membrane  
Actin/ Ataxin-3

S1- Full lenght agarose gel relative to Fig 3C and full length western blot membrane relative to Fig 3D. Red boxes indicate the cropping lines used to generate the figures.

## Supplemental Information



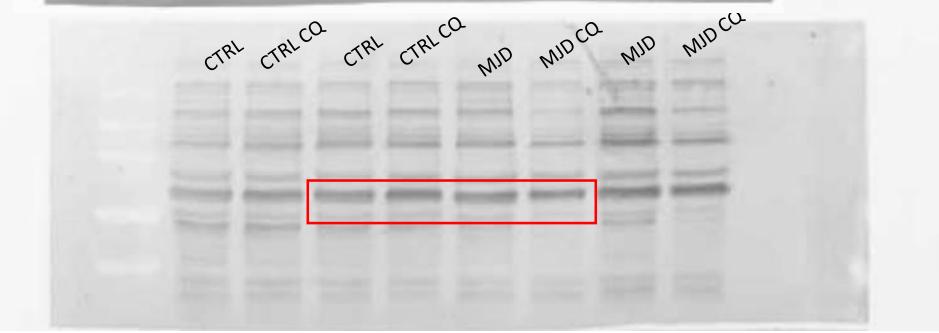
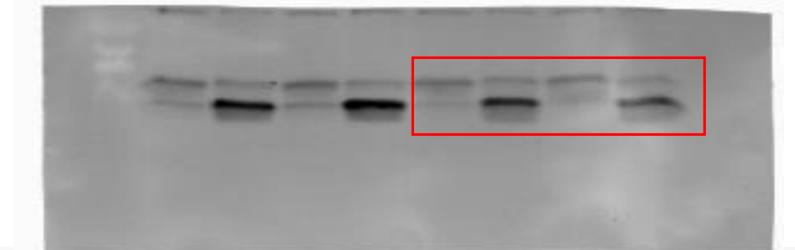
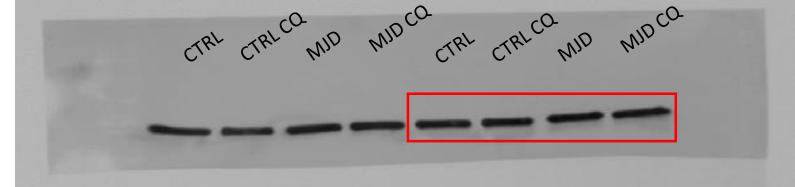
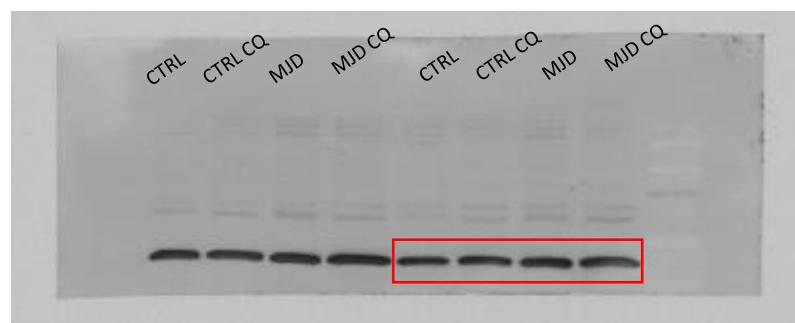
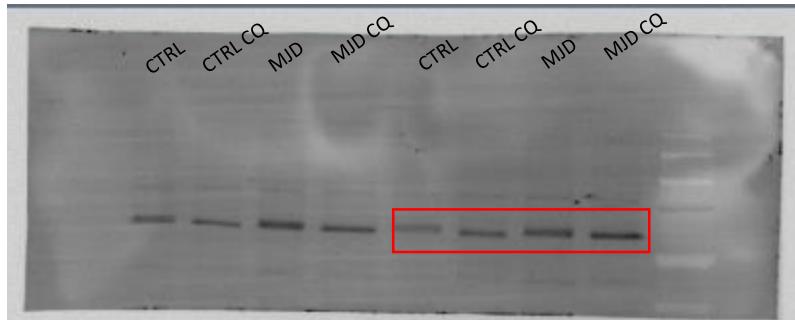
Western blot  
membrane  
Beclin-1



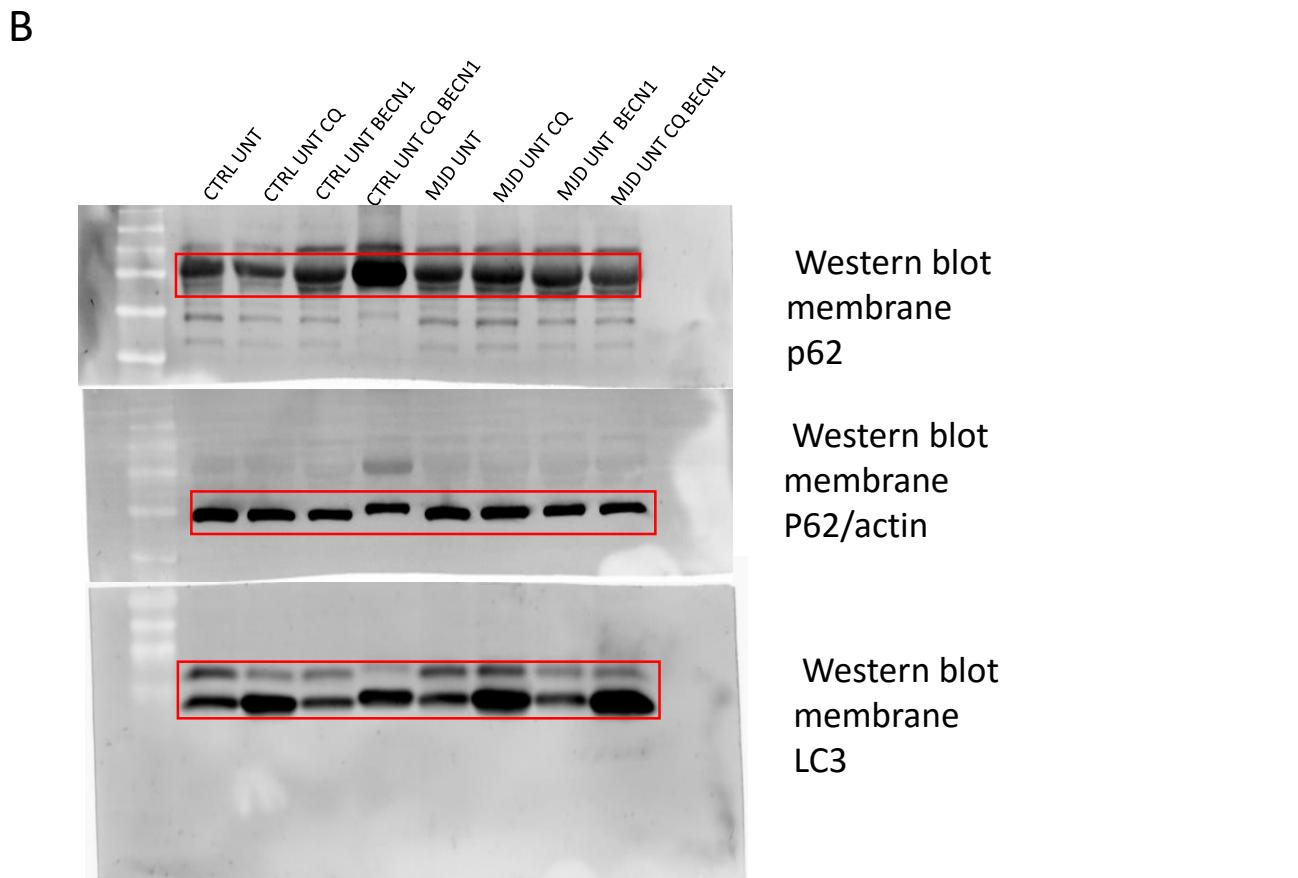
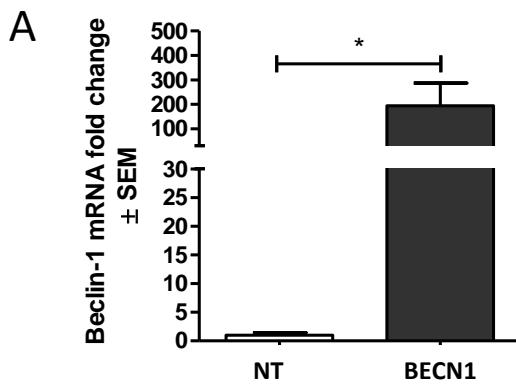
Western blot  
membrane  
Actin/Beclin-1

S2- Full lenght western blot membranes relative to Fig 4A.  
Red boxes indicate the cropping lines used to generate the figures.

## Supplemental Information- Figure 4



S2- Full lenght western blot membranes relative to Fig 4D.  
Red boxes indicate the cropping lines used to generate the figures.



S3- A- Quantification of Beclin-1 mRNA levels on transduced fibroblasts after transduction with a lentiviral vector coding for human beclin-1. GAPDH was used as reference gene and presented levels were normalized for NT (non transduced) condition (Student t-test n=4/n=4 \*p=0.05).

B-Full lenght western blot membranes relative to Fig 5A. Red boxes indicate the cropping lines used to generate the figures.