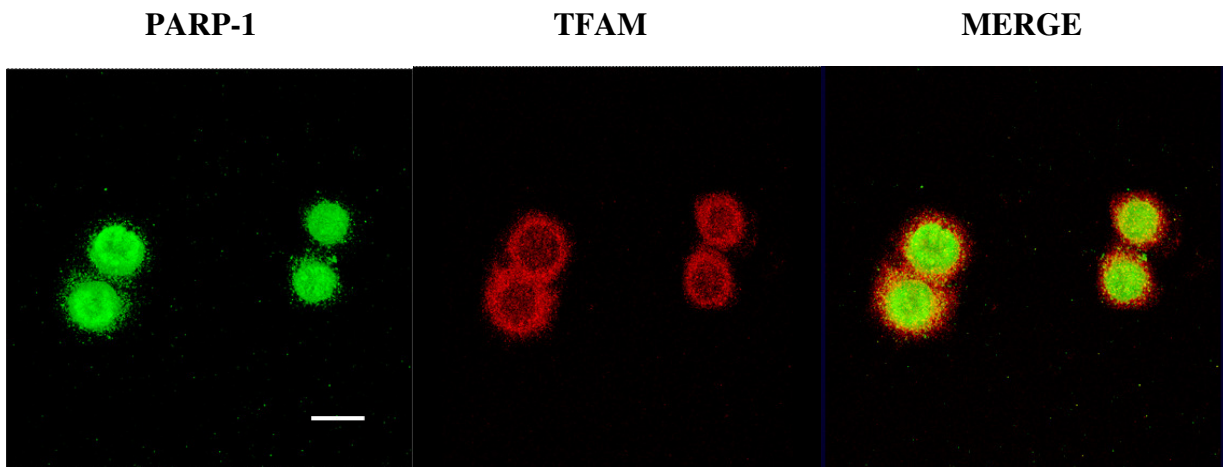
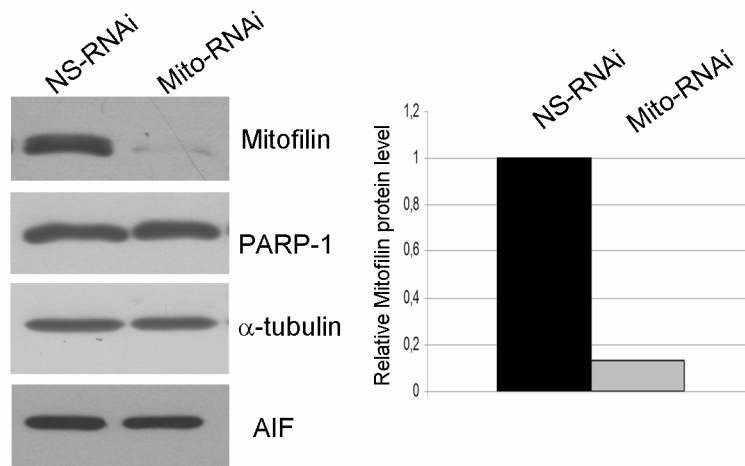


Supplementary Figure 1



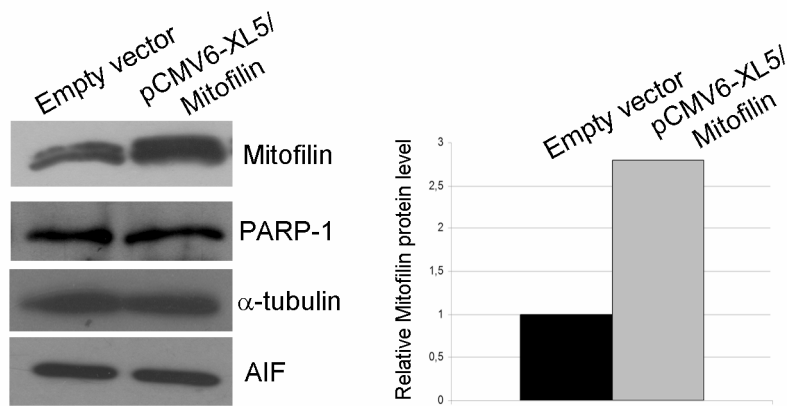
PARP-1 colocalizes with Mitochondrial Transcriptional Factor A (TFAM). Confocal laser scanning microscopy of double immunofluorescence staining performed on fixed HeLa cells labeled with α -PARP-1 (green) and α -TFAM (red) (Abcam). Bars indicate 20 μ m.

Supplementary Figure 2



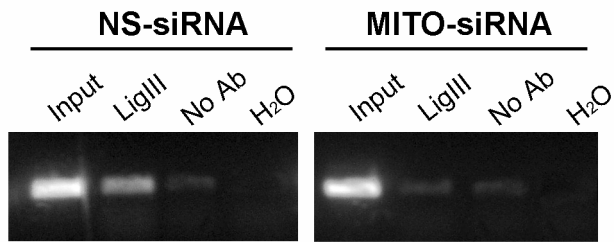
Mitofilin depletion in HeLa cells. HeLa cells were transfected with siRNA specific for Mitofilin (MITO) and with non-specific siRNA (NS). Mitofilin and PARP-1 protein levels were analyzed by western blot from total cellular extracts 72 h later. AIF and α -tubulin were chosen as loading controls. The graph on the right shows the densitometric analysis of Mitofilin band intensities obtained by Image J software.

Supplementary figure 3



Mitofilin over expression in HeLa cells. HeLa cells were transfected with the pCMV6-XL5 vector containing the full length human Mitofilin cDNA (OriGene) or with the empty vector. Mitofilin and PARP-1 protein levels were analyzed by western blot from total cellular extracts 48 h later. AIF and α -tubulin were chosen as loading controls. The graph on the right shows the densitometric analysis of Mitofilin band intensities obtained by Image J software.

Supplementary figure 4



DNA ligase III is associated to mitochondrial DNA and its binding is prevented by Mitofilin depletion. HeLa cells were transfected with Mitofilin (Mito), or non-specific (NS) siRNAs and collected after 72 hrs. PCR analysis after Chromatin Immunoprecipitation with an antibody against DNA ligase III showed the amplification of the desired product size in the D-loop region only in control cells. DNA sample lane descriptions are as follows. (Input: samples isolated from total lysates prior to antibody pull down as an internal positive control; No ab: samples isolated after pull down with no antibody; LigIII: samples isolated after DNA ligase III pull down; H₂O: PCR negative control).