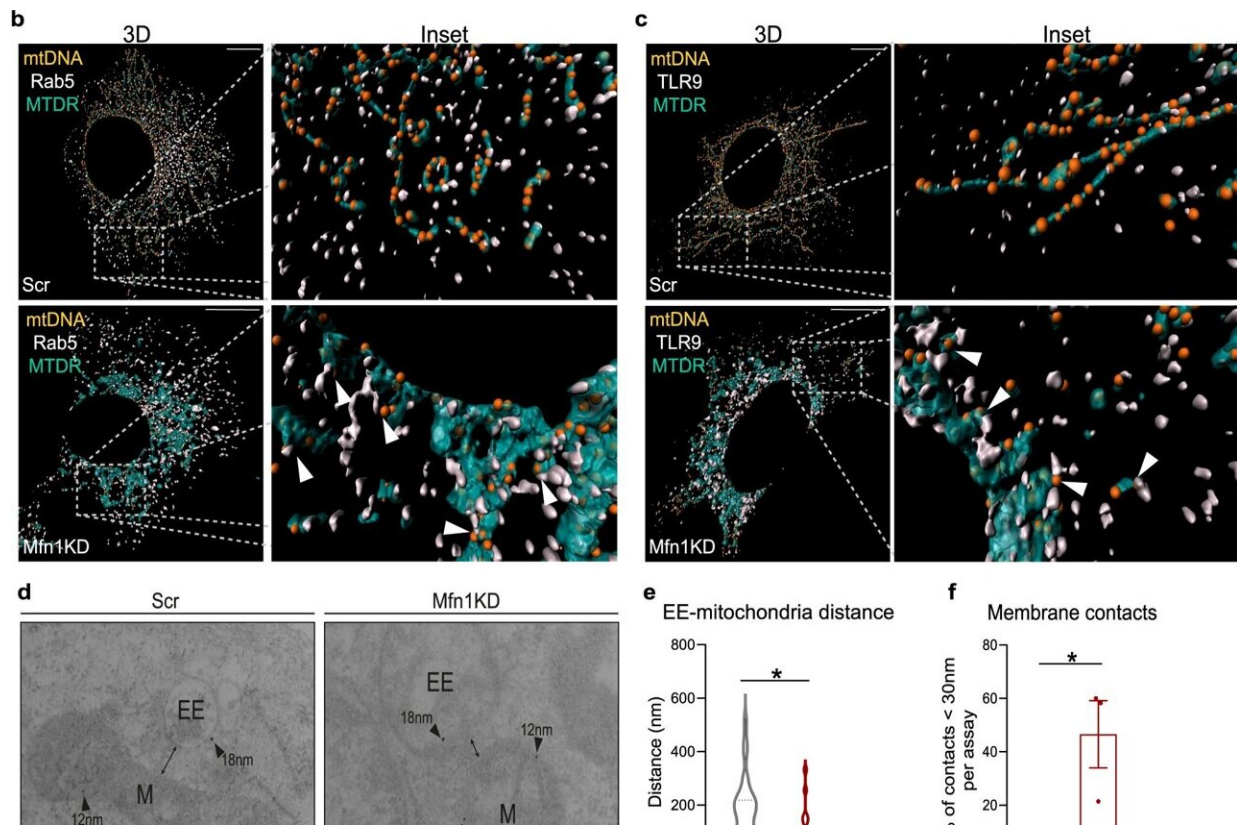


Alterations in mitochondrial dynamics may cause inflammation and muscular atrophy

January 18 2023



Mfn1 deficiency causes preferential location of mtDNA and mitochondria in early endosomes and promotes close contacts between Rab5⁺ early endosomes and mitochondria. **a** Quantification of Pearson's correlation between mtDNA and endosomal markers ($n = 20$ images per condition, except for mtDNA-LAMP1, where $n = 39$). Representative 3D reconstructions of immunostainings using dsDNA with nuclear subtraction (mtDNA, orange), mitochondria with Mitotracker Deep Red (turquoise) and **b** Rab5 (white) or **c** TLR9 (white) (Scale bar, 10 μ m). **d** Representative images of immunogold staining of Rab5 (gold

particle 18 nm) and SdhA (gold particle 12 nm) in Scr- and Mfn1KD myoblasts (Scale bar, 200 nm). **e** Quantification of the distance between marked early endosomes and mitochondria in Scr ($n = 38$ contacts) and Mfn1KD myoblasts ($n = 31$ contacts). **f** Percentage of measured contacts

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