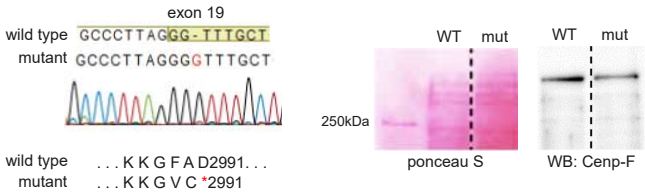
Supplemental Materials

Molecular Biology of the Cell

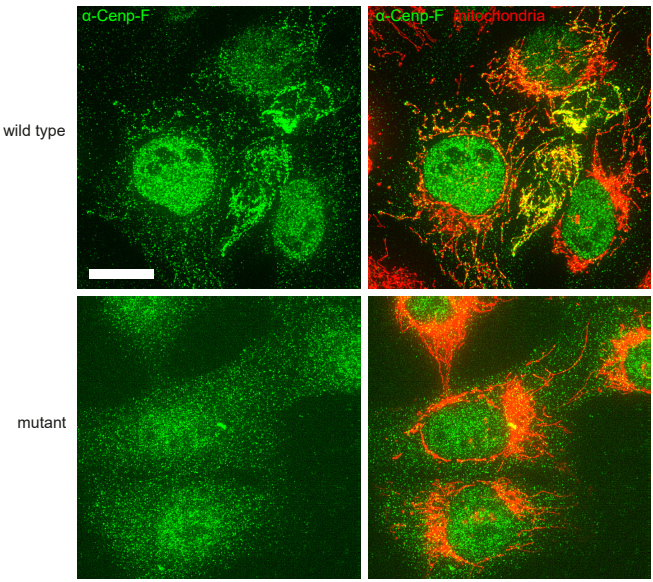
Kanfer et al.

Supplementary Figure 1

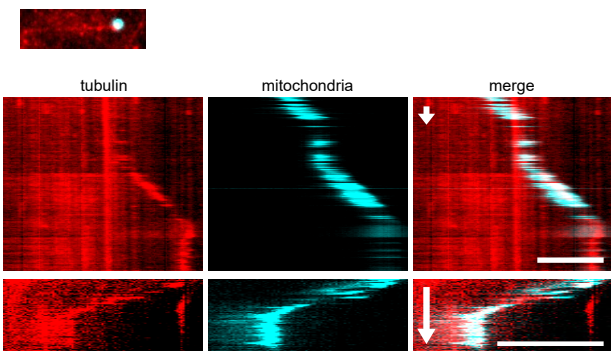
A



B



C



Supplemental Figure 1. CENP-F-independent mitochondrialmovements *in vitro*. (A) Characterization of the CRISPR/Cas9-induced genetic lesion in CENP-F mutant cells. Left, electropherogram of a sequencing reaction from the mutant cell line showing the frame shift mutation and its consequence at protein level. Right, Western blot of protein extract from wild-type and CENP-F mutant cell lines showing a slight decrease in protein abundance. (B) Immunofluorescence of CENP-F (green) relative to mitochondria (red) in wild-type (top) and CENP-F mutant Kermit U2OS cells (Kanfer*et al.* 2015). Scale bar, 20 μm(C) as in Figure 2, except that mitochondria were isolated from CENP-F mutant Kermit U2OS cells) and that recombinant CENP-F was ommitted. Top, kymogram of a mitochondrion following a polymerizing microtubule. Bottom, kymogram of a mitochondrion following a de-polymerizing microtubule. Arrow, 120 s; Scale bar, 5 μm.