



S18 Fig. Measurement of the DNAI2 fluorescence intensity along the flagellar axonemes of control and dynein preassembly mutant sperm. (A) Intensity profile of DNAI2 signal (red) shows a normal distribution of DNAI2 along the flagellar axoneme in control sperm. The intensity profile is co-localizing with the intensity profile of the green signal (acetylated tubulin, used as flagellar marker). (B-J) In *DNAAF2/KTU* (OP-146 II3, OP-234 II1)-, *DNAAF4/DYX1C1* (OP-3399)-, *DNAAF6/PIH1D3* (OP-1899 II1, OP-3141)-, *DNAAF7/ZMYND10* (OP-6 II5, OP-596 II2)-, *CFAP300/C11orf70* (OP-2334)- and *LRRC6* (OP-516)-mutant individuals, the intensity profile of DNAI2 signal (red) shows absence or severe reduction of DNAI2 in flagellar axonemes, when compared to control sperm. The red line along the sperm flagella (within the dashed box) indicate the path of the intensity profile. One representative example is shown per individual.