



**S10 Fig. Measurement of the DNAI1 fluorescence intensity along the flagellar axonemes of control and dynein preassembly mutant sperm.** (A) Intensity profile of DNAI1 signal (red) shows a normal distribution of DNAI1 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 DNAI1 signal (red) shows absence or severe reduction of DNAI1 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.