Expanded View Figures

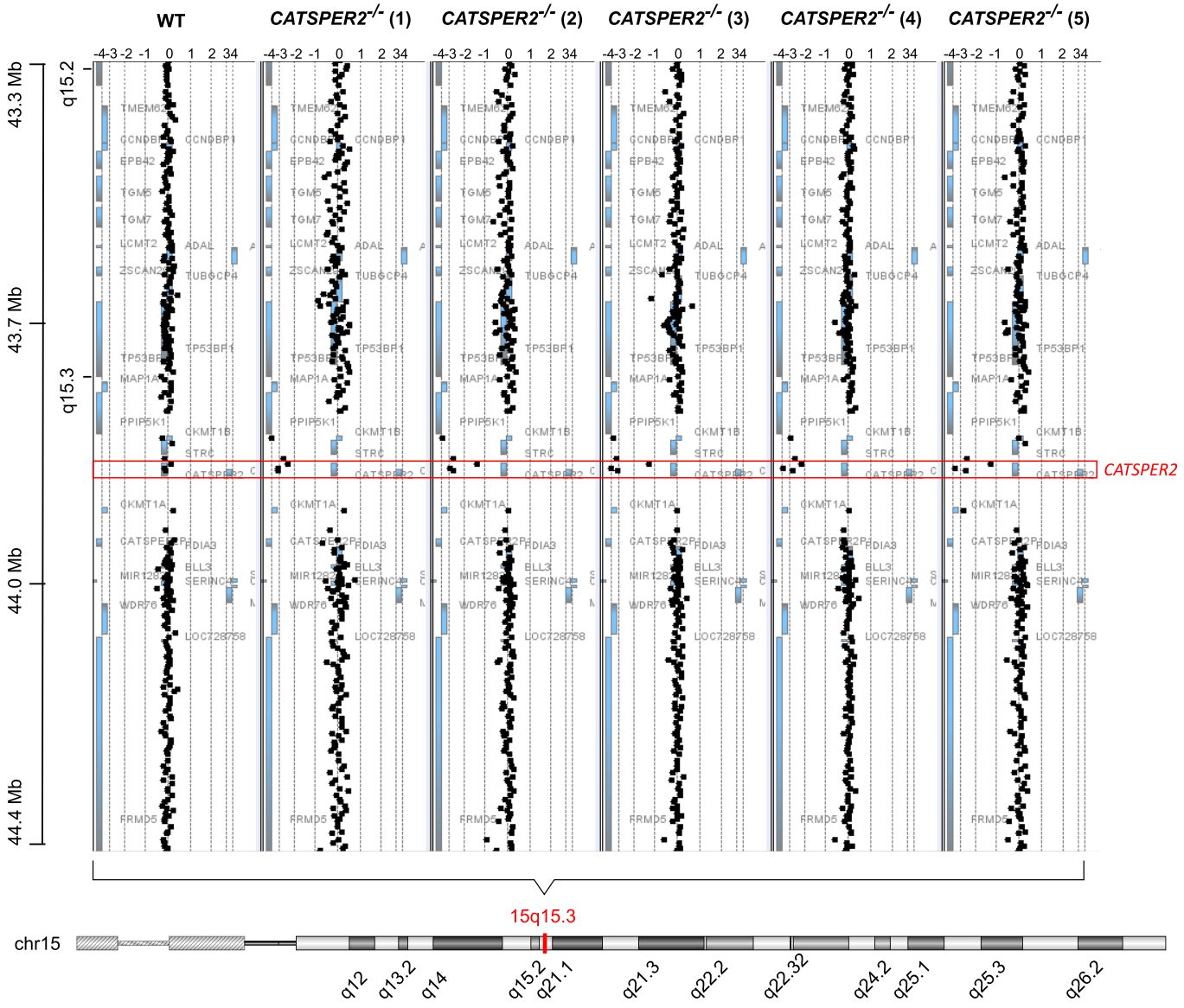

Figure EV1. Array comparative genomic hybridization analysis (array CGH).
Array CGH analysis (e.g., Tüttelmann *et al*, 2011) of DNA copy number variants (CNV) in a healthy donor (WT) and the five patients (*CATSPER2*$^{-/-}$ 1–5) suffering from the deafness-infertility syndrome. The black squares represent the fluorescence intensity ratios (log2) upon cohybridization of fluorescence-labeled genomic DNA fragments of the healthy donor or patients and controls (reference). Gene dosage variations are indicated by a fluorescence ratio $\neq 0$. A ratio of < -1.5 indicates a homozygous deletion.

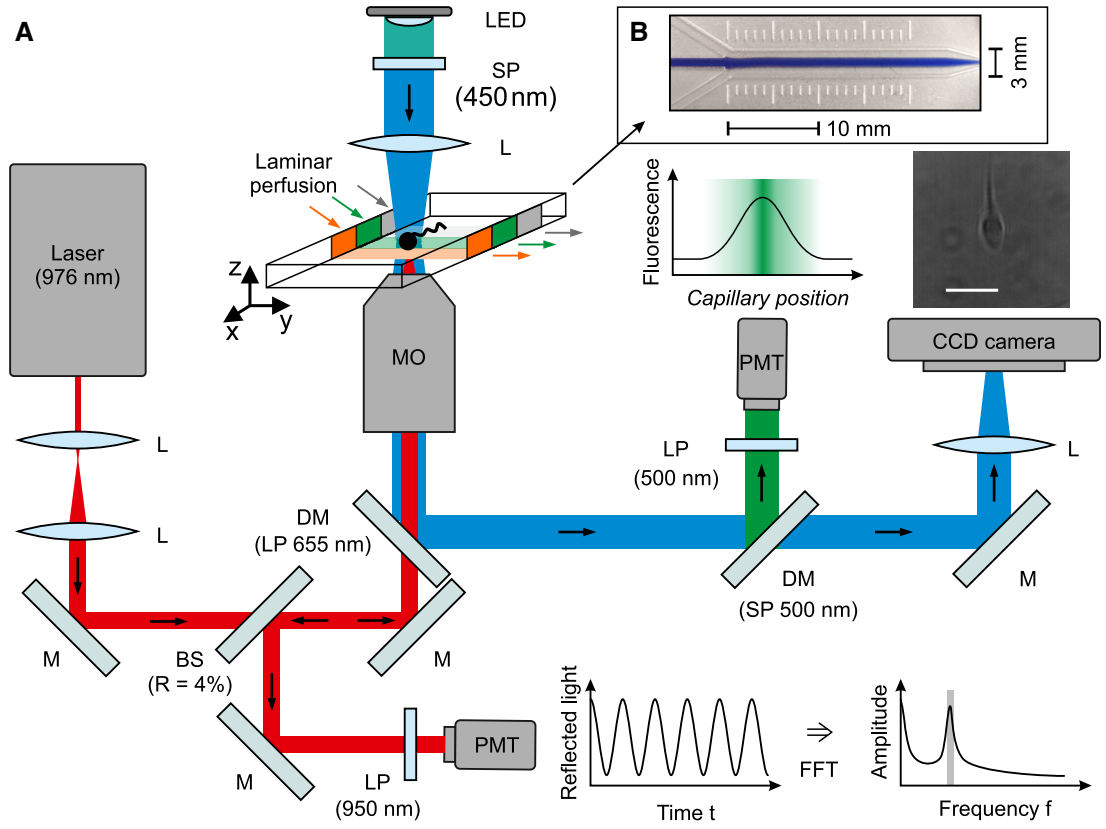

Figure EV2. Optical trapping and microfluidics setup to study longitudinal rotation in human sperm.

A A detailed description is provided in the materials and methods section. BS, beam splitter. DM, dichroic mirror. L, lens. LP, long-pass filter. M, mirror. PMT, photomultiplier tube. R, reflectivity. SP, short-pass filter. Scale bar represents 10 μm.

B Visualization of the laminar flow profile inside the microfluidics capillary. The center ("barrier") stream was supported with blue ink for the ease of illustration.