



**Fig. S10. Directed CPC movement on antiparallel microtubule bundles requires the kinesin Kif4A.** Same analysis of CPC movement as described in fig. S7 was performed on extracts where Kif4A was depleted (A to C) and where Kif4A depletion was followed by addback of purified Kif4A-GFP (D to F). **(A,D)** Spinning disc confocal image of CPC visualized with Alexa647-labeled antibody against AurkB at an AAIZ at the beginning of a time-lapse sequence (*top*). Segmented lines for kymographs are overlaid in yellow (*bottom*). **(B,E)** Kymographs generated from the time-lapse: total duration of 90 sec with 1.29 sec intervals for (B) and total duration of 177 sec with 3.94 sec intervals for (E). **(C,F)** Instantaneous CPC velocities ( $v$ ) plotted against distance from bright CPC midpoint ( $D$ ) determined from 3 kymographs, with the mean velocity calculated for each 1  $\mu\text{m}$  distance bin.