Supplemental material





Fig 5a bottom



Figure S1. Full scans of blots shown in Fig. 5 a. Sections irrelevant for the images shown in the figure are crossed out.



Figure S2. Antibody no. 9336 (Cell Signaling Technology) specifically detects GSK3β-(Ser9)P. (a) Parallel Cos1 cell cultures were left untransfected or they were transfected with expression constructs coding for myc-GSK3β-Ser9 (wt) or for myc-GSK3β-Ser9Ala (S9A). Cultures were either stained with DAPI and anti-myc or anti-GSK3β-(Ser9)P (a), or lysates were subject to WB (b) with same antibodies and those indicated in (c). In untransfected control cultures both immunofluorescence and WB show minor myc-GSK3β-(Ser9)P immunoreactivity (green) localized in the Golgi adjacent to the nuclei (blue). Transfected cells visualized by myc immunoreactivity (red) show strong myc-GSK3β-(Ser9)P immunoreactivity (green), but only when transfected with constructs for myc-GSK3β-Ser9 (wt, due to autophosphorylation), but not with myc-GSK3β-Ser9Ala (S9A). Bars, 20 μm. (c) Full scans of blots shown in b. Sections irrelevant for the images shown in the figure are crossed out.



Video 1. **GFP-CLIP-170 comets are captured at agrin-induced AChR clusters.** Dynamics of GFP-CLIP-170 decorated MT plus ends in a myotube derived from a *GFP-Clip-170*^{ki/ki} mouse. Note the immobilization and increased CLIP-170 loads within compared with outside of the agrin-induced AChR cluster (marked in Fig. 6 b). Frames are acquired over a period of 160 s (1 frame per second) in the TIRF plane (inverted TIRF microscope [TE2000; Nikon] equipped with an oil immersion HCX PL APO 100x TIRF objective [NA = 1.49]).



Video 2. **Deletion of CLASP2 impairs capturing of GFP-CLIP-170 comets at agrin-induced AChR clusters.** Dynamics of GFP-CLIP-170 decorated MT plus ends in a myotube derived from a *GFP-Clip-170^{ki/ki}* mouse deficient in CLASP2. Note that deletion of CLASP2 abolishes the difference in MT plus-end dynamics within and outside the agrin-induced AChR cluster (marked in Fig. 6 e). Image acquisition as in Video 1.