

Title: Supplementary Movie 1:

Description: Compilation of movies for the TIRF experiments in Fig. 6 and Supplementary Fig. 9. The white scale bar corresponds to 3  $\mu\text{m}$  and is valid for all movies. TIRF: total internal reflection.

Title: Supplementary Movie 2:

Description: Movies for the TIRF experiments in Fig. 5. The white scale bar corresponds to 3  $\mu\text{m}$  and is valid for all movies. TIRF: total internal reflection