## **Supplementary Movie 1.**

HUVECs cultured on collagen-coated glass-bottom dishes were transfected with pEGFP-N1 expressing C-terminally-EGFP-tagged human endophilin A1 BAR domain (residues 1-296). A series of time-lapse images was obtained every 5 s using an Olympus IX-71 epifluorescence microscope. 0 s of Fig. 7E corresponds to 245 s of this movie.