## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: List of plasma membrane anchors used in Supplementary Figure 4d, e.

File Name: Supplementary Data 2

Description: Sequence information of Lyn-ECFP-FRB, FRB-ECFP-KRas4BCAAX, EYFP-FKBP, EYFP-FKBP-

iSH2(mouse, beta), and mCherry-PH(Akt).

File Name: Supplementary Movie 1

Description: Confocal images of endocytic vesicles produced by plasma membrane targeting of iSH2 domain. HeLa cells were transiently transfected with Lyn-ECFPFRB, EYFP-FKBP-iSH2, and mCherry-PH(Akt). Imaging was performed at 37°C with 5% CO2. 100 nM rapamycin was added at indicated time.

File Name: Supplementary Movie 2

Description: Confocal images of EYFP-FKBP negative control. HeLa cells were transiently transfected with Lyn-ECFP-FRB, EYFP-FKBP, and mCherry-PH(Akt). Imaging was performed at 37°C with 5% CO2. 100 nM rapamycin was added at indicated time.

File Name: Supplementary Movie 3

Description: Confocal images of room temperature control. HeLa cells were transiently transfected with Lyn-ECFP-FRB, EYFP-FKBP-iSH2, and mCherry-PH(Akt). Imaging was performed at 23°C with 5%CO2. 100 nM rapamycin was added at indicated time.