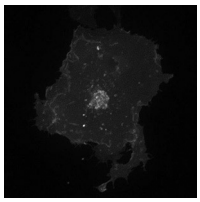
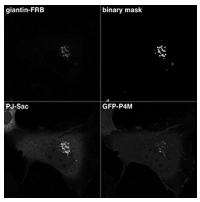
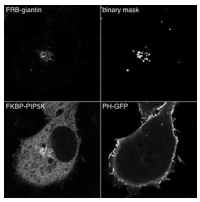
Hammond et al., http://www.jcb.org/cgi/content/full/jcb.201312072/DC1



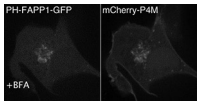
Video 1. **A 3D maximum intensity projection of GFP-P4M.** Video shows a 3D maximum intensity projection of 38 0.2-µm-spaced confocal optical sections of a COS-7 cell expressing GFP-P4M acquired at 8.15 s per frame. The video plays 60 times faster than acquisition. Data are time-lapse confocal images from Fig. 1 A acquired with a spinning-disk confocal microscope (Eclipse Ti [Nikon]; CSU-X1 [Yokogawa Corporation of America]).



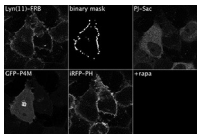
Video 2. **Effect of PJ-Sac recruitment on the Golgi localization of GFP-P4M.** Time-lapse confocal (LSM 780; Carl Zeiss) images of the indicated constructs acquired every 30 s over 22 min and playing 360 times faster than acquisition. Data are from Fig. 2 B. Rapamycin addition was after frame 5.



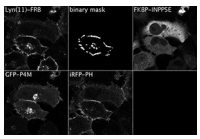
Video 3. **Effect of FKBP-PIP5K recruitment on the Golgi localization of PH-GFP.** Time-lapse confocal (LSM 780; Carl Zeiss) images of the indicated constructs acquired every 30 s over 22 min and playing 360 times faster than acquisition. Data are from Fig. 2 B. Rapamycin addition was after frame 5.



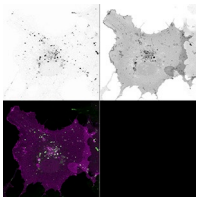
Video 4. **Effect of 5 µg/ml Brefeldin A on the localization of PH-FAPP1-GFP and mCherry-P4M (as indicated).** Data are time-lapse confocal images acquired with a spinning-disk confocal microscope (Eclipse Ti [Nikon]; CSU-X1[Yokogawa Corporation of America]). The video was acquired at 30 s per frame over 30 min and plays 360 times faster than acquisition. Data are from Fig. 3. Addition of Brefeldin A (BFA) at 10 min is indicated.



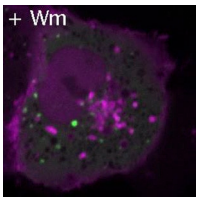
Video 5. **Effect of PJ-Sac recruitment on the PM localization of GFP-P4M and iRFP-PH-PLCδ1.** Time-lapse confocal (LSM 780; Carl Zeiss) images of the indicated constructs acquired every 4 s over 3 min and playing 48 times faster than acquisition. Data are from Fig. 4 A. Rapamycin (rapa) addition was after frame 15.



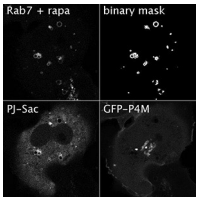
Video 6. **Effect of FKBP-INPP5E recruitment on the PM localization of GFP-P4M and iRFP-PH-PLCδ1.** Time-lapse confocal (LSM 780; Carl Zeiss) images of the indicated constructs acquired every 4 s over 3 min and playing 48 times faster than acquisition. Data are from Fig. 4 A. Rapamycin (rapa) addition was after frame 15.



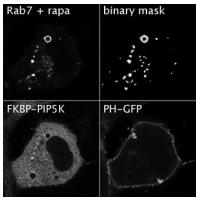
Video 7. **mCherry-P4M colocalizes with LysoTracker green–labeled endosomes/lysosomes.** The time-lapse confocal video (LSM 780; Carl Zeiss) was acquired one frame every 4 s over 200 s and plays 46 times faster than acquisition. magenta, mCherry-P4M.



Video 8. **Effect of wortmannin on the localization of GFP-FYVE and mCherry-P4M.** Data are time-lapse confocal images acquired with a spinning-disk confocal microscope (Eclipse Ti [Nikon]; CSU-X1[Yokogawa Corporation of America]). The video was acquired at 30 s per frame over 30 min and plays 355 times faster than acquisition. Data are from Fig. 6 A. Wm, wortmannin. Green, GFP-FYVE; magenta, mCherry-P4M.



Video 9. **Effect of PJ-Sac recruitment on the late endosomal/lysosomal localization of GFP-P4M.** Time-lapse confocal (LSM 780; Carl Zeiss) images of the indicated constructs were acquired every 30 s over 10 min and play 240 times faster than acquisition. Data are from Fig. 6 B. Addition of rapamycin (rapa) after frame 5 is indicated.



Video 10. **Effect of FKBP-PIP5K recruitment on the late endosomal/lysosomal localization of GFP-PH-PLCδ1.** Time-lapse confocal (LSM 780; Carl Zeiss) images of the indicated constructs were acquired every 30 s over 22 min and play 240 times faster than acquisition. Data are from Fig. 6 D. Addition of rapamycin (rapa) after frame 5 is indicated.