

SUPPLEMENTAL FIGURES AND FIGURE LEGENDS

Supplemental Fig S1: GAS8_{GMAD-CT}-GFP is localized to the cilia basal body. C3H10T1/2 cells were transiently transfected with mGas8_{FL}, mGas8_{GMAD-CT}, mGas8_{IMAD-GMAD} or mGas8_{CT}, fixed 72 hours post transfection and immunostained (red) using antibodies to acetylated tubulin to label the shaft of the cilium (A) and β -tubulin to label cellular microtubules (B). Note that GAS8_{GMAD-CT}-GFP is enriched at the base of the cilium, while mGas8_{FL} associates with microtubules but is not enriched in the basal body in particular. mGas8_{IMAD-GMAD} accumulates in cytoplasmic aggregates. mGas8_{CT} is homogenously expressed all over the cell. Neither of the latter two fragments appears to associate with microtubules.

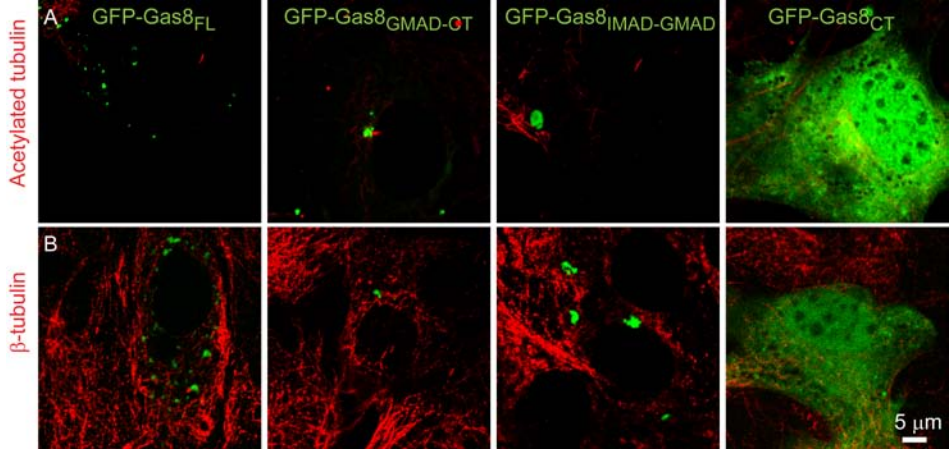
Supplemental Fig S2: mGas8-GFP distribution in cells relative to the Golgi and lysosomes. C3H10T1/2 cells were transiently transfected with mGas8_{FL}, mGas8_{GMAD-CT} or mGas8_{IMAD-GMAD}, fixed and stained (red) using either antibodies to GM130 (A) or the lysosomal marker LysoTracker (B). mGas8 is adjacent but does not display classic co-localization with GM130 (A). White arrows in B point at lysosomes, indicating no association with mGas8. Note that Gas8_{GMAD-CT} labeling seems to be adjacent to the Golgi as well, consistent with the report that the Golgi is adjacent to the centrosome during interphase (1).

Supplemental Fig S3: Cilia length and Smo content is shifted by stable expression of GRK2. Population distribution analysis of cilia length (A) and Myc-Smo positive cilia length (B) in C3H10T1/2 cells, stably expressing the indicated constructs or empty vectors. Fixed cells were immunostained with anti-acetylated tubulin and anti-Myc antibodies as in Fig.3. Co-expression of Smo and GRK2, but not Smo and GRK2_K220R caused a shift in the distribution of cilia length toward longer cilia (A). Similarly, co-expression of Smo and GRK2 caused a shift in the distribution of cilia length that is filled with Myc-Smo (B).

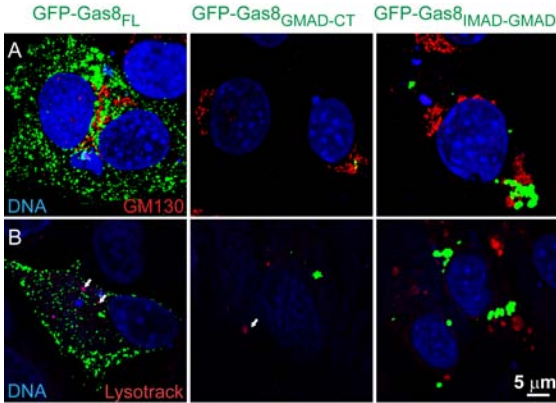
SUPPLEMENTAL REFERENCE

1. Sutterlin, C., and Colanzi, A. (2010) *J Cell Biol* 188, 621-628

Supplemental Figure S1



Supplemental Figure S2



Supplemental Figure S3

