

Supplemental information

Figure S1. Localization of PIP3 in Ras/Rap mutants. To measure PIP3 levels, the PIP3 detector PHcracGFP was co-expressed in the indicated cell strains. Confocal images are shown for unstimulated cells (left panel) and for cells stimulated with cAMP from a micropipette on the right (right panel).

Movie S1. Movie showing the PIP3 detector PHcracGFP expressed in wild-type cells. Cells are stimulated with a micropipette containing 10^{-4} M cAMP; the pipette is placed at the top.

Movie S2. Movie showing the PIP3 detector PHcracGFP expressed in GbpD^{OE} cells. Cells are stimulated with a micropipette containing 10^{-4} M cAMP from the right.

Movie S3. Movie showing the subcellular localization of the Rap1-GTP detector GFP-RBD_{RalGDS} expressed in wild-type cells. Cells are stimulated with a micropipette containing 10^{-4} cAMP; the white dot indicates the position of the micropipette.

