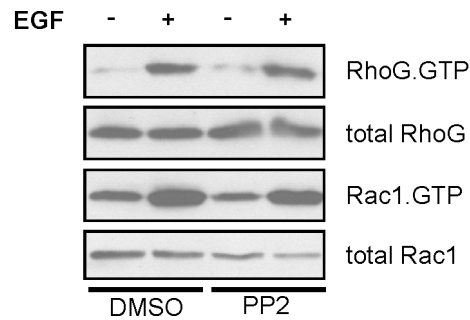
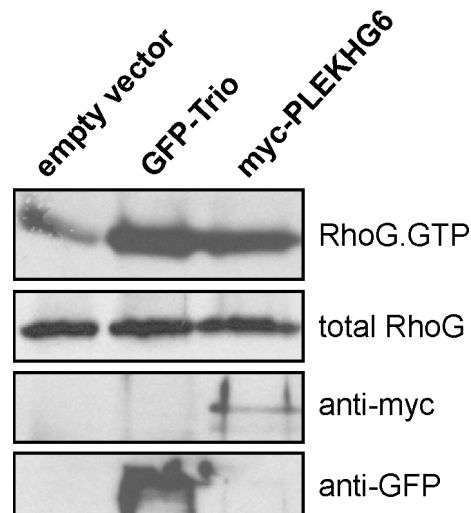


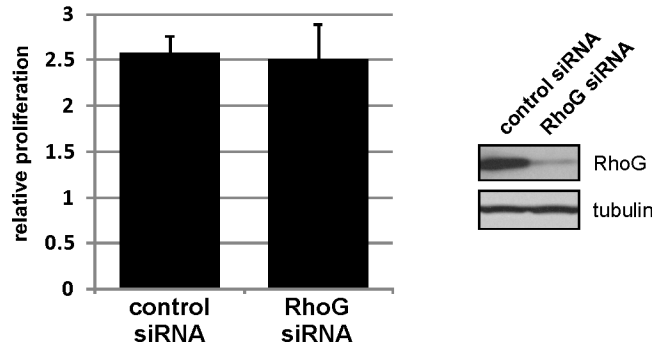
## Supplemental Figures



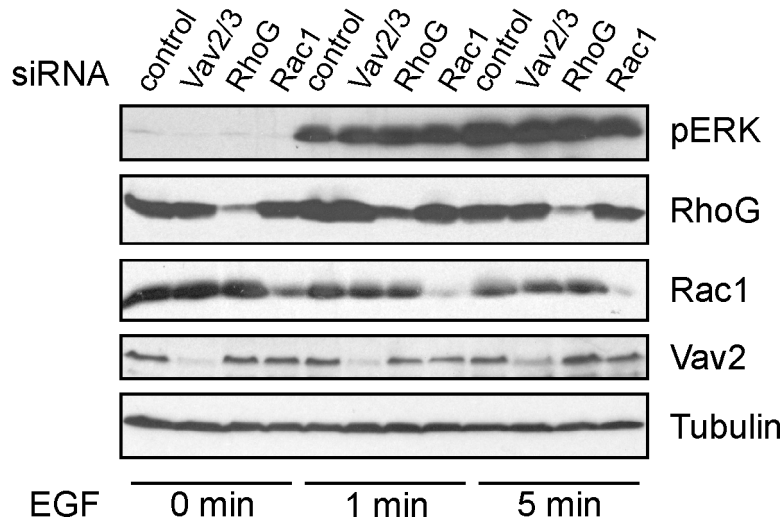
**Supplemental Figure S1:** Inhibition of src-family kinases by the pharmacological inhibitor PP2 does not influence the rapid activation of RhoG and Rac1. HeLa cells were EGF stimulated for 30 seconds in the presence of the src inhibitor PP2 (10  $\mu$ M, pretreatment 1 hour). RhoG.GTP and Rac1.GTP were measured by ELMO- or PBD pull down assays.



**Supplemental Figure S2:** Endogenous RhoG is activated by expression of PLKHG6. HeLa cells were transfected with eukaryotic expression constructs for GFP-Trio or myc-PLKHG6. Levels of RhoG.GTP were measured by ELMO- or PBD-pull down assays. Expression of GFP-Trio and myc-PLKHG6 was confirmed by blotting with anti-GFP or anti-myc antibodies, respectively.



**Supplemental Figure S3:** Proliferation of HeLa cells is not affected by RhoG knock-down. siRNA transfected HeLa cells were plated in 12 well dishes and starved for 4 hours before the cells were incubated for 24 hours in DMEM containing EGF (20 ng/ml). Total amounts of cells per well were determined at 0 and 24 hours. Relative proliferation was calculated as the ratio of total numbers of cells per well after 24 hours to 0 hours.



**Supplemental Figure S4:** Phosphorylation of ERK after EGF stimulation is not changed by knock-down of RhoG, Rac1 or Vav2 / Vav3, respectively. HeLa cells were transfected with siRNAs targeting the indicated GTPases and GEFs. After stimulating for different times with 20 ng/ml EGF, the cells were lysed and analyzed by western blotting.