

## Supplementary Information

Figure S1, supplement

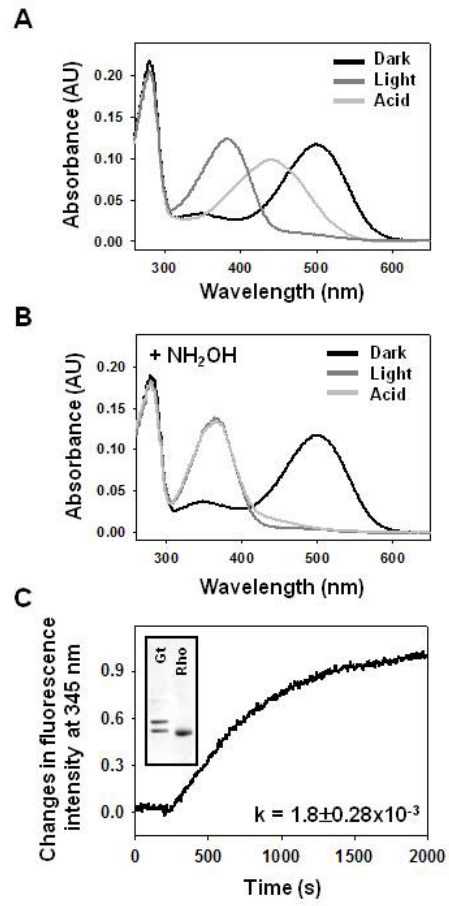


Figure S1. Spectral properties of Rho. **A**, UV-visible absorbance spectra of Rho purified by  $Zn^{2+}$ -extraction. Spectra are shown of ground state Rho (black line), photoactivated Rho\* (grey line), and acidified Rho\* (light grey line). **B**, UV-visible absorbance spectra of  $Zn^{2+}$ -extracted Rho in the presence of  $NH_2OH$ . Spectra are shown of ground state Rho (black line), photoactivated Rho\* (grey line) and acidified Rho\* (light grey line). **C**, Intrinsic fluorescence increase of the  $Gt_\alpha$  subunit resulting from interaction with photoactivated Rho\*. The reaction was carried out at 20 °C in a continuously stirred cuvette with 25 nM Rho and 250 nM Gt in 10 mM BTP, pH 7.0, containing 120 mM NaCl, 5 mM  $MgCl_2$ , and 1 mM DDM. Five  $\mu M$   $GTP\gamma S$  was added after 300 s of recording. The relative activation rate (k) was calculated from three independent experiments. *Inset*, SDS-PAGE analysis of Rho and Gt used in these experiments; 1  $\mu g$  of Gt and 1  $\mu g$  of Rho were loaded on 10% SDS-PAGE. Proteins used for these experiments were pure and functional.

Figure S2, supplement

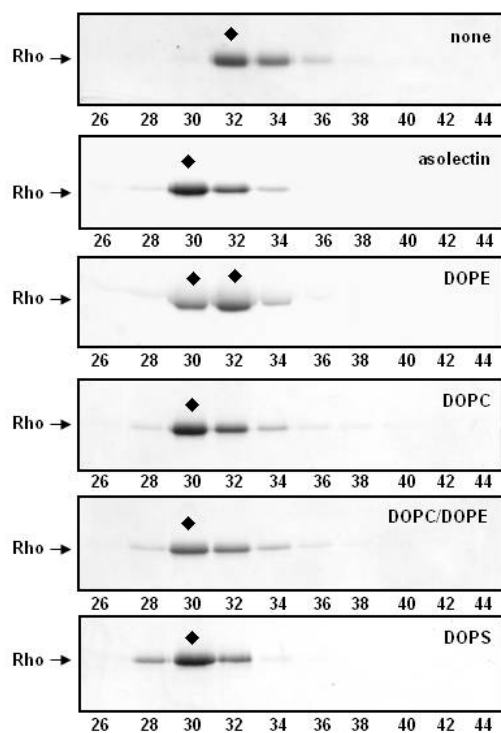


Figure S2. Gel filtration of free Rho in DDM without and with designated added phospholipids. Fractions (30  $\mu$ l) obtained after gel filtration were analyzed by Coomassie blue-stained SDS-PAGE. ◆ - Indicates fractions containing the highest concentrations of Rho. Results indicate that phospholipids cause Rho to migrate in higher molecular weight fractions.