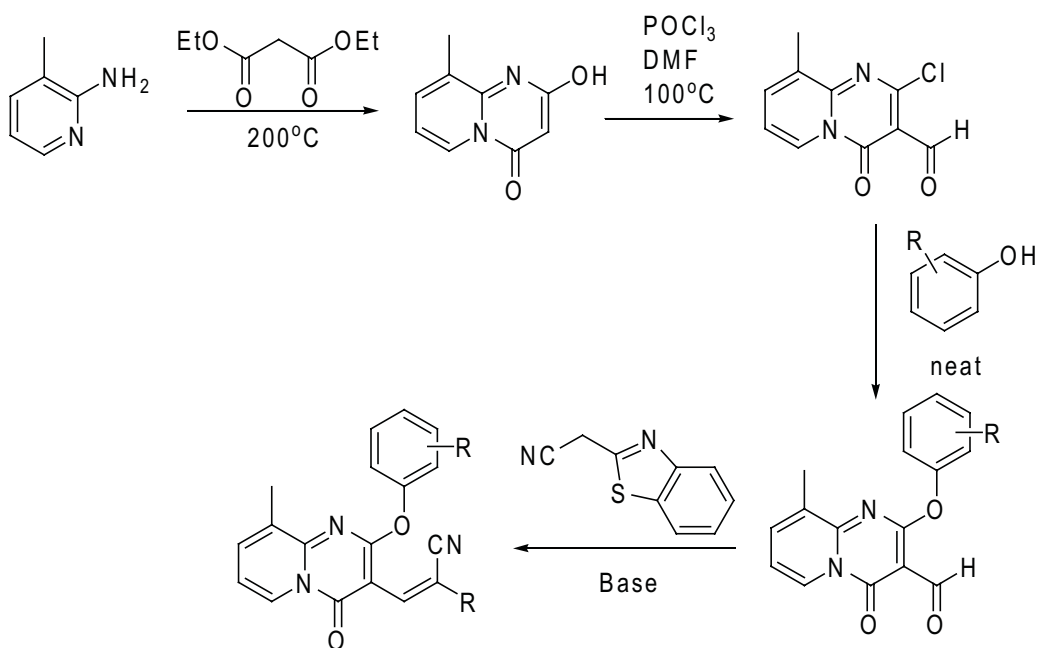


## Supplemental Figures:

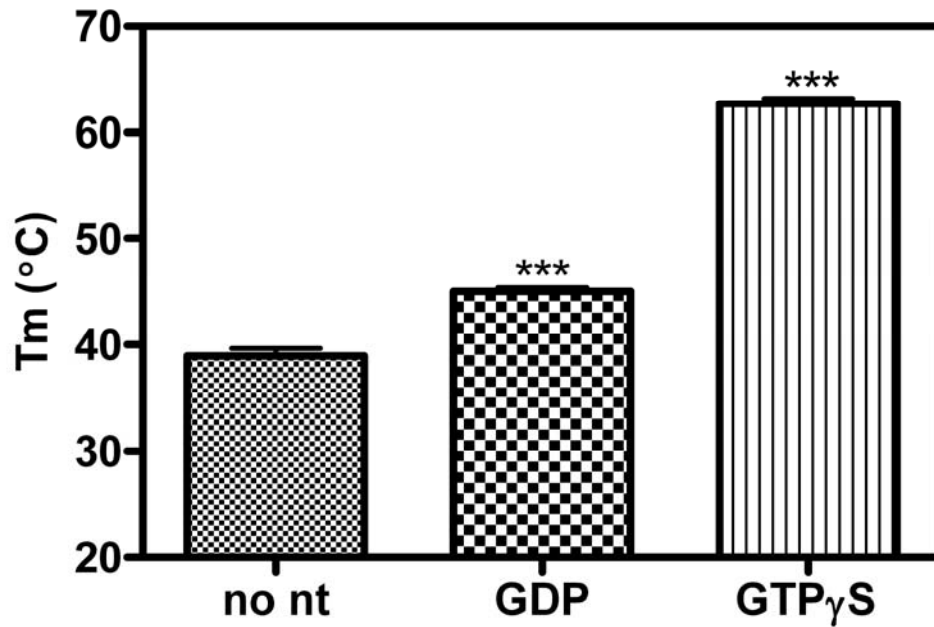
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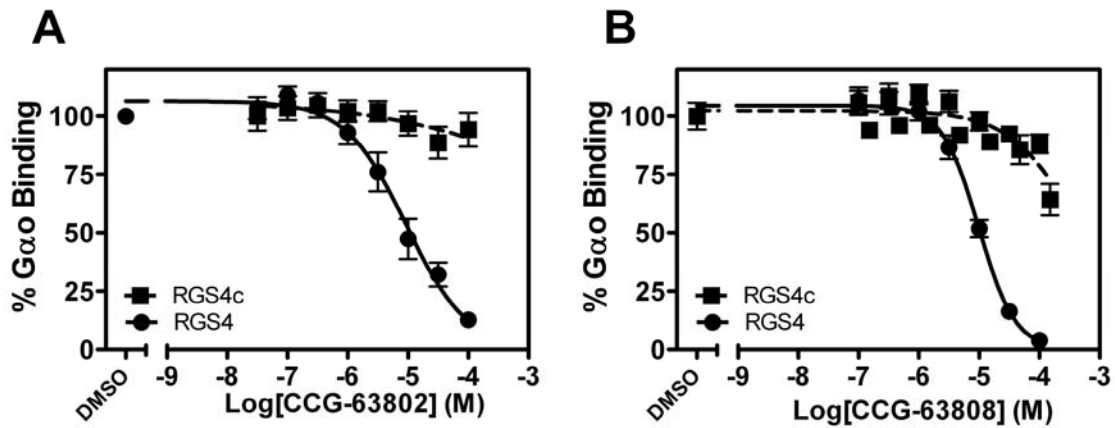
Pharmacology



**Supplemental Figure 1.** Reaction scheme for the synthesis of CCG-63802 and CCG-63808.



**Supplemental Figure 2.**  $G\alpha_o$  is thermally stabilized in presence of nucleotide. Purified  $G\alpha_o$  was stripped of nucleotide by gel filtration in a buffer containing EDTA. Lack of nucleotide was confirmed by spectroscopic analysis. The melting temperature ( $T_m$ ) of  $G\alpha_o$  (2.5  $\mu$ M) was determined by the thermal stability assay as described (see Methods) in the presence or absence of 50  $\mu$ M GDP or GTP $\gamma$ S. Nucleotide free (no nt)  $G\alpha_o$  has a  $T_m$  of  $38.9 \pm 0.7^\circ\text{C}$ . The protein is stabilized in the presence of 50  $\mu$ M GDP by 6°C ( $T_m$ :  $45.0 \pm 0.3^\circ\text{C}$ ) and is stabilized by 23°C in the presence of 50  $\mu$ M GTP $\gamma$ S ( $T_m$   $62.7 \pm 0.5^\circ\text{C}$ ). Data are presented as mean  $\pm$  SEM from 3 separate experiments.



**Supplemental Figure 3.** A) CCG-63802 and B) CCG-63808 are much less potent on a mutant form of RGS4 that lacks cysteine residues in the RH domain. Data are presented as mean  $\pm$  SEM from 3 separate FCPIA experiments.