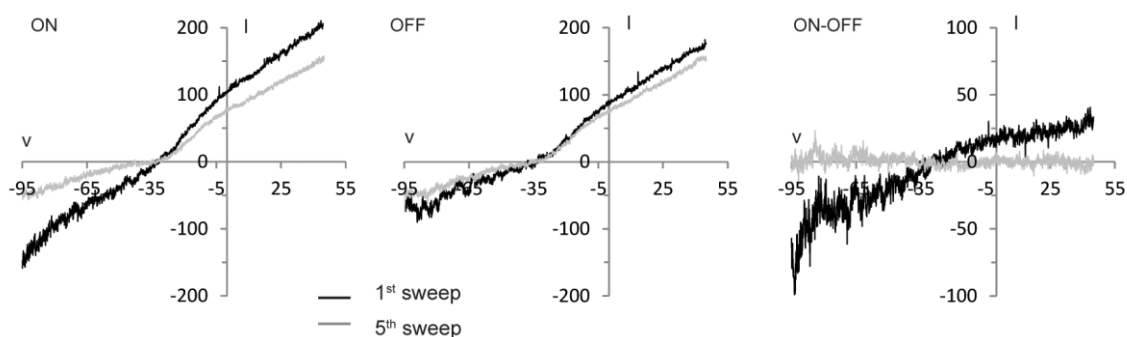


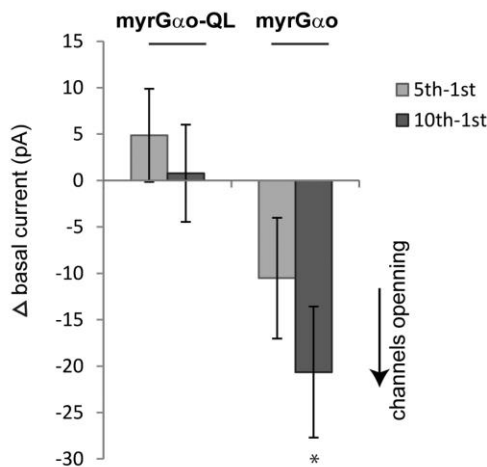
# The TRPM1 channel in ON-bipolar cells is gated by both the $\alpha$ and the $\beta\gamma$ subunits of the G-protein $G_o$

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## Supplementary Figures



**Supplementary figure 1. Only TRPM1 is closed by myrG $\alpha_o$ -QL.** An example of I-V curves taken from a cell dialyzed with G $\alpha_o$ -QL for the 1<sup>st</sup> and 5<sup>th</sup> sweeps during light ON (left) and during light OFF (middle). The difference between the curves during light ON and OFF (right) gives the contribution of TRPM1. Note that at the 1<sup>st</sup> sweep (black), TRPM1 has a significant conductance while at the 5<sup>th</sup> sweep (gray), the curve is flat, indicating TRPM1 is closed.



**Supplementary figure 2. Under dark-adaptation, 40 nM myrG $\alpha_o$ , but not 40 nM myrG $\alpha_o$ -QL, increases the holding current.** Plotted are the differences between the basal currents at the 5<sup>th</sup> time point minus that in the first (light gray) and that between the 10<sup>th</sup> time point and the 1<sup>st</sup> time point (darker gray) for WT myrG $\alpha_o$  (right bars) and the mutated active form (left bars). When channels are opening, the inward current increases (has a more negative value) giving negative values. For WT the difference increased with time, but for QL it remained practicably the same.