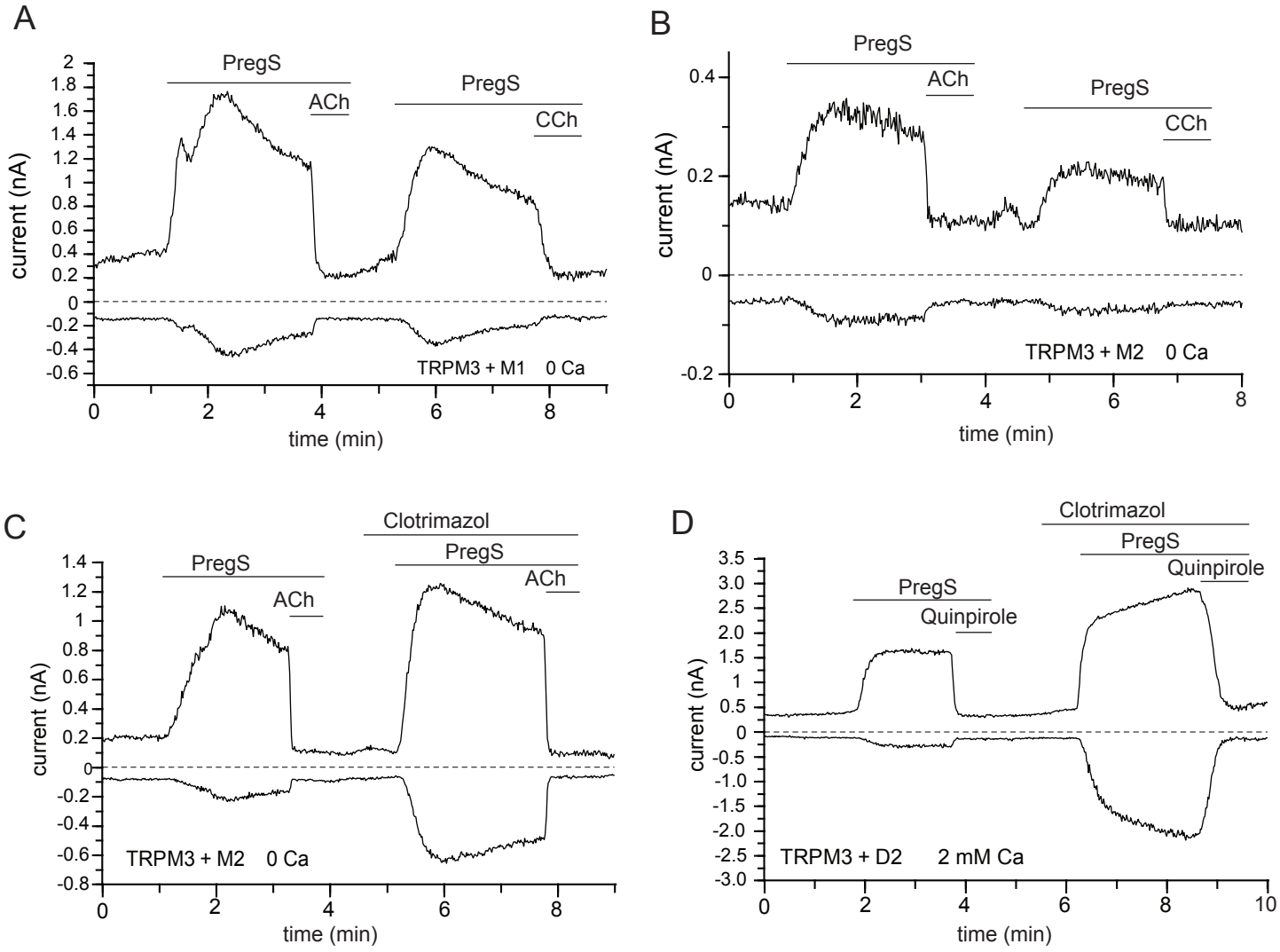

Figure 1 - figure supplement 2

Activation of GPCRs inhibit TRPM3 currents in various conditions

Whole-cell patch clamp experiments in HEK cells transfected with mTRPM3α2 were performed as described in Materials and Methods; TRPM3 currents were evoked by 50 μM PregS, currents are plotted at -100 and 100 mV (lower and upper traces). Additional GPCR constructs cotransfected with TRPM3 are indicated at the individual panels. Current inhibition was essentially complete in all experiments, thus only representative traces are shown. *(A)* Cell transfected with M1 muscarinic receptors, the applications of 5 μM ACh and 100 μM CCh are indicated by the horizontal lines. The extracellular solution contained no added Ca^{2+} and 1 mM EGTA (n=3). *(B)* Similar experiment to that shown in panel (A) but in cells transfected with M2 receptors (n=3). *(C)* Similar experiment to that shown in B, but 10 μM clotrimazole was co-applied with PregS to stimulate the alternative conduction pathway of TRPM3 (n=2). *(D)* Experiment in cells also transfected with D2 dopaminergic receptors; the applications of 200 nM Quinpirole and 10 μM Clotrimazole are shown by the horizontal lines, the experiment was performed in the presence of 2 mM extracellular Ca^{2+} (n=5).