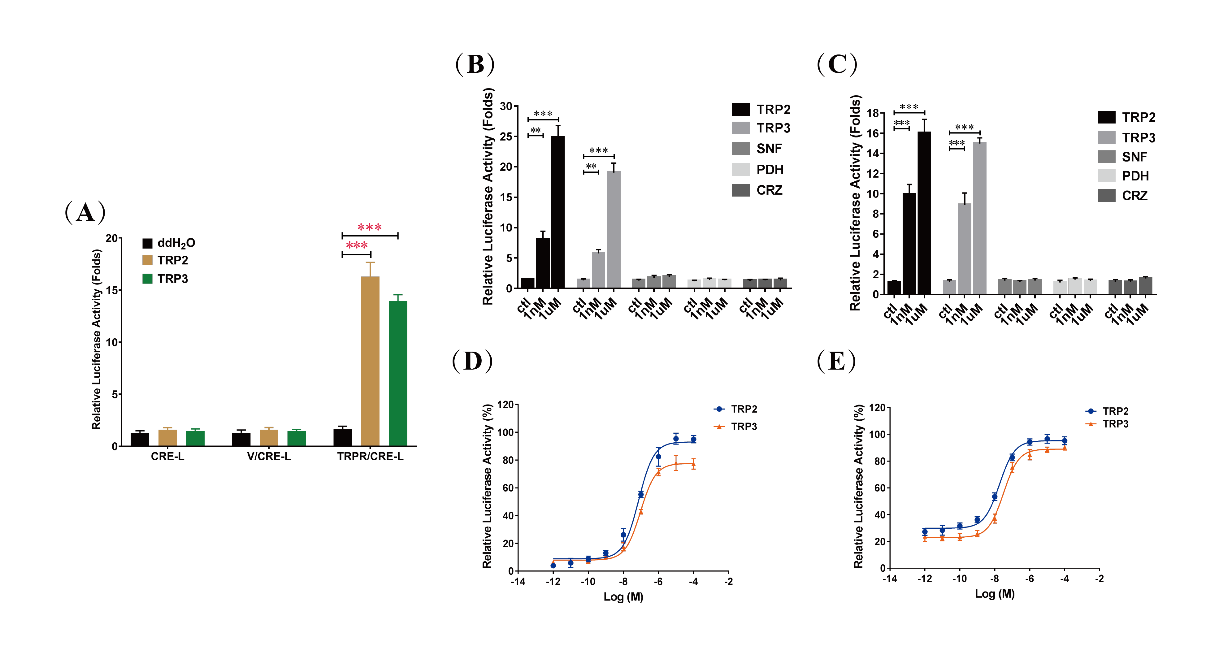
Figure 5A-figure supplement 2: cAMP generation is specific to TRP2 and TRP3 and dose dependent



**TRP/TRPR-mediated cAMP accumulation in cells.** (**A**), Luciferase activity of HEK293 cells transfected with the reporter gene pCRE-Luc (CRE-L), and co-transfected with pFLAG-TRPR (TRPR) or vehicle vector (V) were determined in response to ddH2O and TRP (TRP2 or TRP3, 1 μM) treatment. TRP-dependent TRPR activation increases cAMP levels more than 10-fold (see also main text). Luciferase activity of HEK293 cells (**B**) and Sf21 cells (**C**) co-transfected with TRPR and CRE-L were determined in response to different neuropeptides (TRP2, TRP3, short neuropeptide F (SNF), pigment-dispersing hormone (PDH), and corazonin (CRZ)) at different concentrations (1 nM or 1 μM). Increase of cAMP was specific to TRP2 and TRP3. Dose-dependent changes of luciferase activities, indicating cAMP increases, in HEK293 cells (**D**) and Sf21 cells (**E**) co-transfected with TRPR and CRE-L revealed typical kinetics in response to TRP2 and TRP3. All data are presented as mean ± s.e.m. from three independent experiments. Student’s t-tests were used for pairwise comparisons (\*\*: *p* < 0.01, \*\*\*: *p* < 0.001).