Fujiwara et al., http://www.jgp.org/cgi/content/full/jgp.200810002/DC1

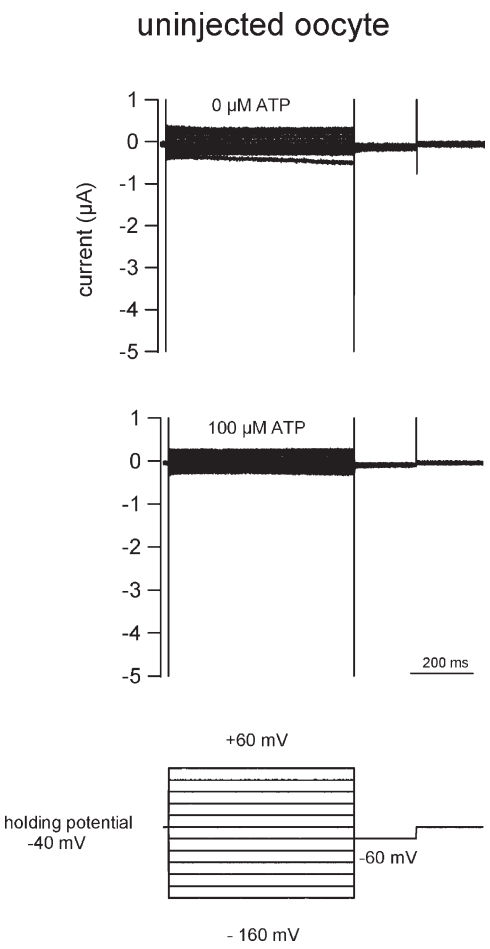

Figure S1. Negative control recordings from an un-injected oocyte. Macroscopic currents were recorded from non-cRNA–injected oocytes before and after the application of 100 μM [ATP]. The pulse protocol is indicated at the bottom.

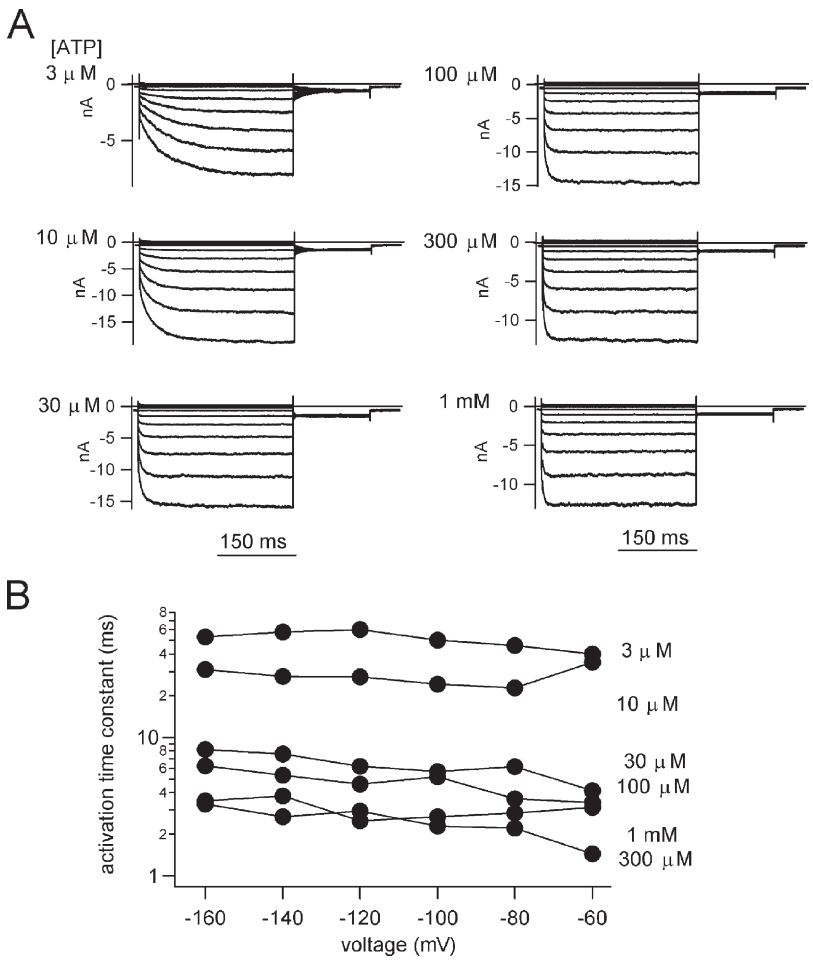

Figure S2. Whole cell patch clamp recordings with a K^+-based standard pipette solution. (A) Macroscopic currents through $P2X_2$ WT expressed in HEK293 cells were recorded using the same voltage step protocols in Fig. 2 in the presence of the indicated [ATP]. The intracellular solution is a K^+-based standard one with divalent cations as described in Materials and methods. All current traces were recorded from an identical patch. (B) Dependence of the activation kinetics on voltage and [ATP].

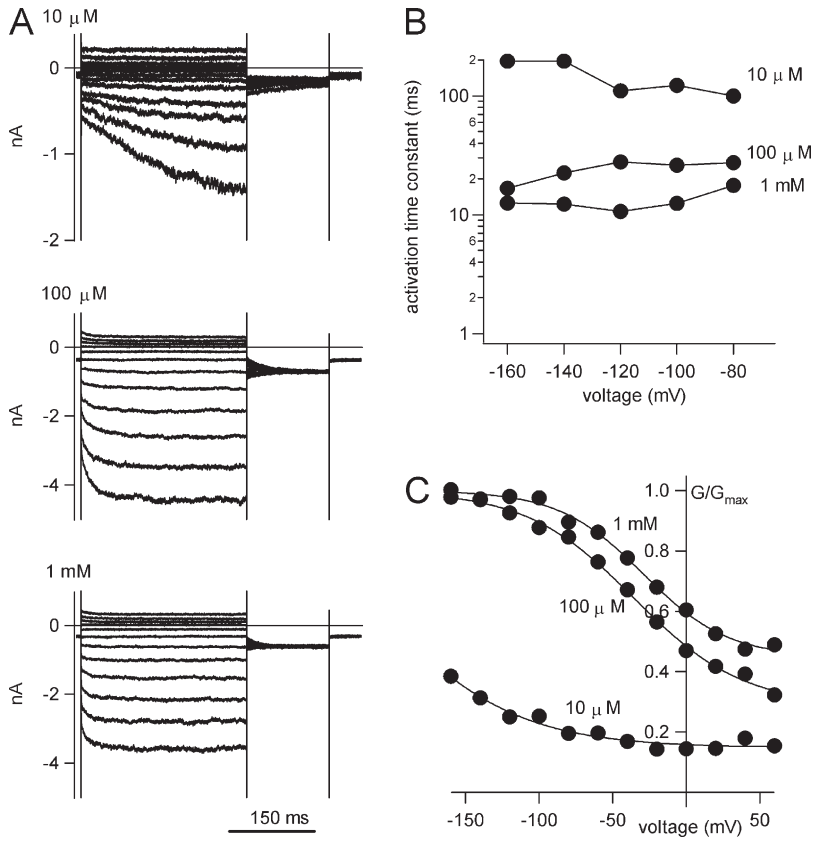

Figure S3. Whole cell patch clamp recordings with a blocker-free pipette solution. (A) Macroscopic currents through $P2X_2$ WT expressed in HEK293 cells were recorded using the same voltage step protocols in Fig. 2 in the presence of the indicated [ATP]. The intracellular solution did not contain any divalent cations as described in Materials and methods. All current traces were recorded from an identical patch. (B) Dependence of the activation kinetics on voltage and [ATP]. (C) Normalized G-V relationships derived from the recording in A.

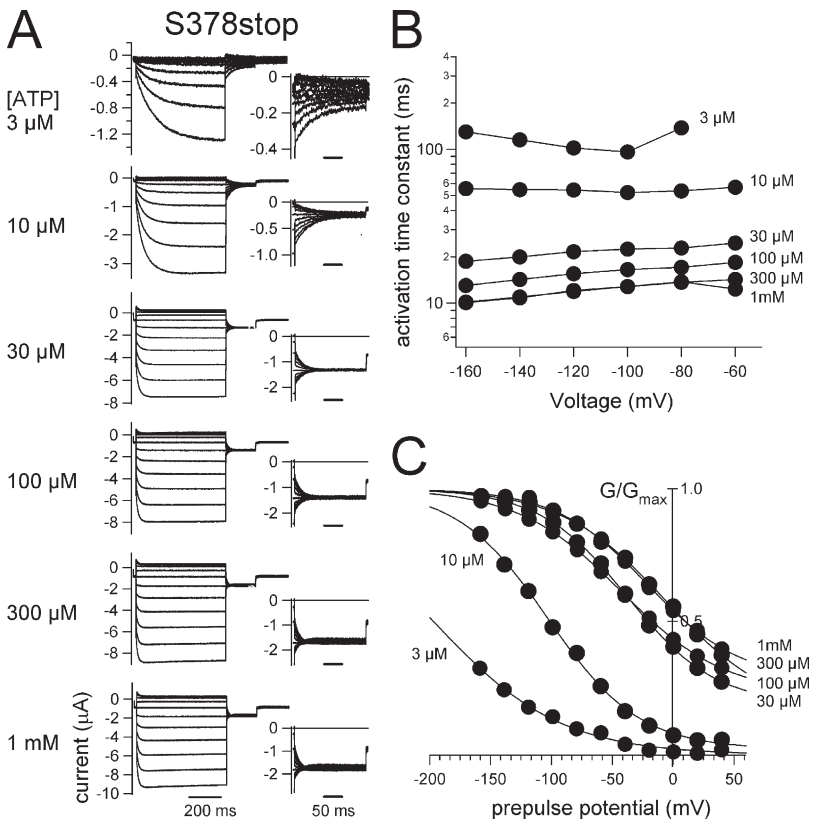

Figure S4. Macroscopic current recordings through the S378stop mutant expressed in *Xenopus* oocytes evoked by step pulses in the presence of various [ATP]. (A) Macroscopic currents were recorded as in Fig. 2 in the presence of the indicated [ATP]. Enlarged images of the tail currents are shown in the insets. All current traces were recorded from an identical oocyte and shown after subtracting data obtained in the absence of ATP. (B) Dependence of the activation kinetics of S378stop mutant on voltage and [ATP]. (C) Normalized G-V relationships derived from the macroscopic current recording in A.