Supporting Information

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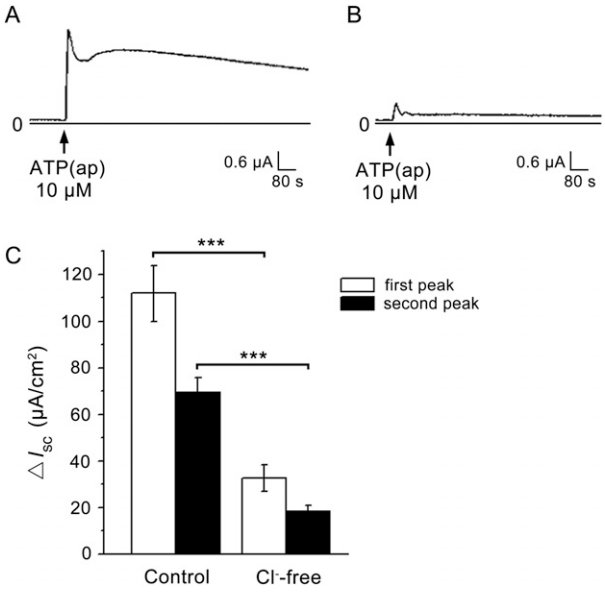

Fig. S1. Cl^--dependence of the I_{sc} response to ATP. I_{sc} recordings obtained from proximal trachea tissues bathed in normal K–H solution (*A*) and in Cl^--free solution (*B*). (*C*) A summary of the effects in the different conditions. Data are presented as mean change in I_{sc} ± SEM (n = 4) and are based on four independent experiments (*A*–*C*). ***$P < 0.001$.

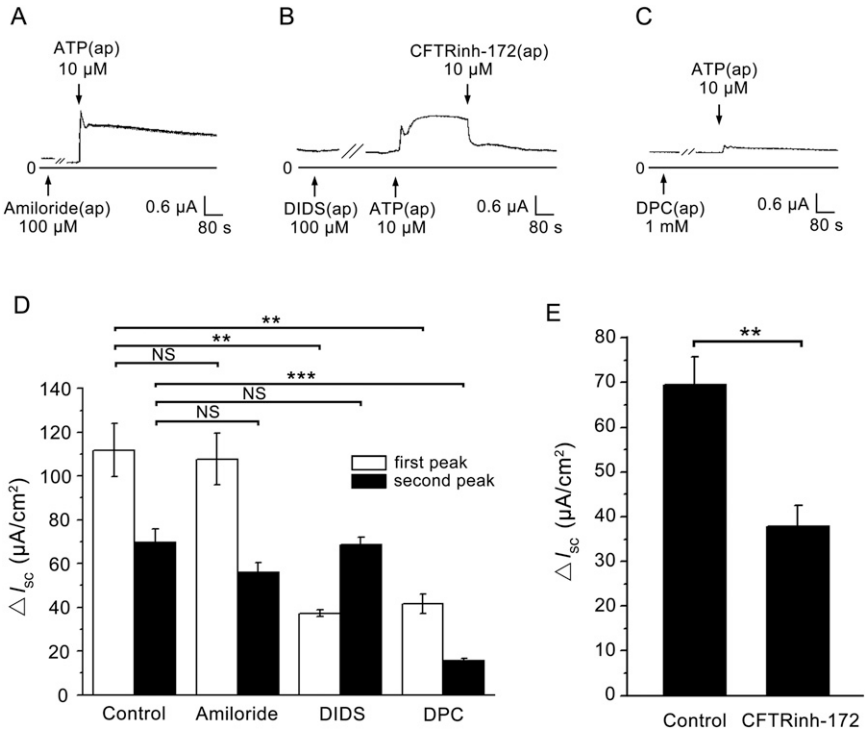

Fig. S2. Effects of ENaC and Cl^- channel blockers on ATP-induced I_{sc} currents. Addition of 10 μM ATP to the apical side (ap) of the proximal trachea tissues caused a rise in I_{sc} response. This response was not changed by adding 100 μM Amiloride (an ENaC blocker) (ap) (*A*) but was partially inhibited by adding 100 μM DIDS (a CaCC blocker) (ap) and 10 μM CFTRi-172 (a CFTR blocker) applied to the cells (ap) when the ATP-induced I_{sc} response stays at the plateau (*B*) and was almost inhibited by 1 mM DPC (a nonselective Cl^- channel blocker) (ap) (*C*). (*D*) A summary of the effects of Amiloride, DIDS, and DPC on the ATP-induced I_{sc} response. (*E*) A summary of the effects of CFTRi-172 on the second phase of ATP-induced I_{sc} response. Data are presented as mean change in $I_{sc} \pm$ SEM ($n = 4$) and are based on four independent experiments (*A*–*E*). $^{**}P < 0.01$; $^{***}P < 0.001$; NS, $P > 0.05$.

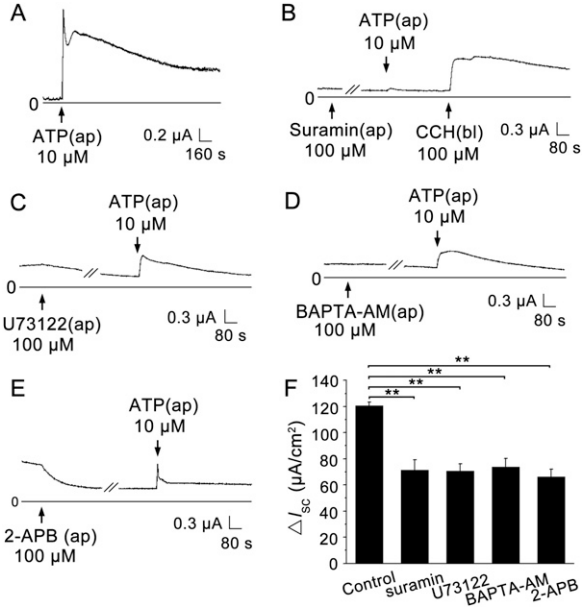

Fig. S3. ATP-induced I_{sc} responses were mediated by the P2Y2-R. Addition of 10 μM ATP to the apical side (ap) of the proximal trachea tissues caused a rise in I_{sc} response (*A*). The response was found to be partially inhibited after 100 μM suramin (a P2-R antagonist) (ap) pretreatment for 15 min; the addition of 100 μM Carbachol (CCH, an analog of acetylcholine) to the basolateral side (bl) of cells was done to check the activity of cells (*B*). The response was also found to be partially inhibited after 100 μM U73122 (a PLC activation inhibitor) (ap) (*C*) or BAPTA-AM (a $[Ca^{2+}]_i$ chelator) (ap) (*D*) and/or 2-APB (a IP3 receptor blocker) (ap) (*E*) pretreatment for 15 min. (*F*) A summary of the effects of suramin, U73122, BAPTA-AM, and 2-APB. Data are presented as mean change in $I_{sc} \pm$ SEM ($n = 4$) and are based on four independent experiments. $^{**}P < 0.01$.

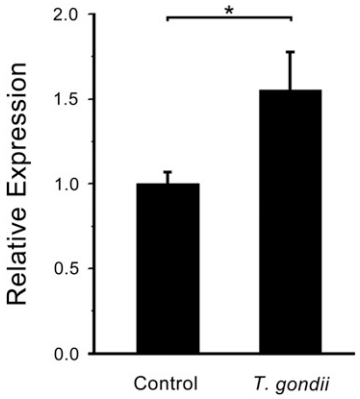

Fig. S4. *T. gondii* infection results in increased P2Y2-R expression. Quantitative real-time PCR analysis of mRNA expression of P2Y2-R in mice trachea treated without or with *T. gondii* for 3 d. Absolute values were corrected using beta-actin as a reference gene. Gene expression was reported as the relative variation to unstimulated control tissue mRNA levels. Bars represent means ± SEM ($n = 3$) and are based on three independent experiments. *$P < 0.05$.