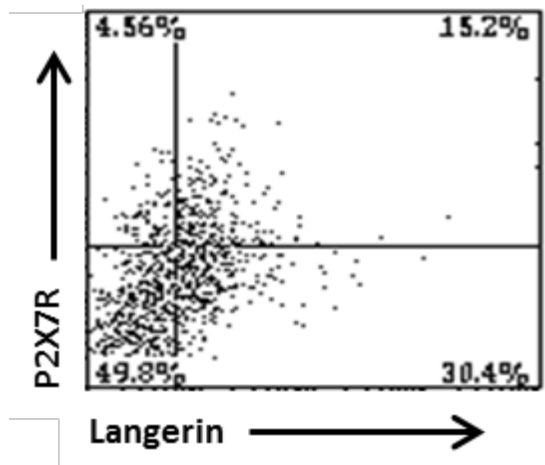
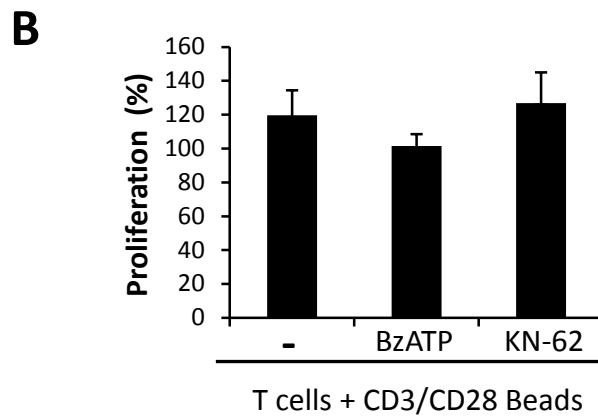
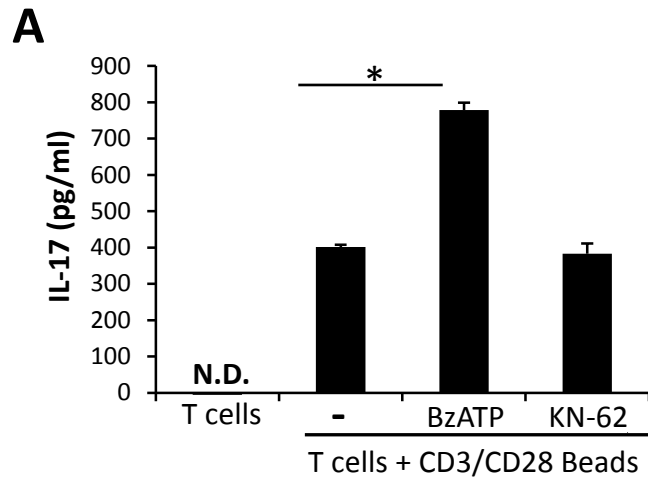


**Supplemental Figure 1.** SmiDC response following increasing doses of BzATP. SmiDCs were cultured for 24 h in the presence of increasing doses of BzATP then (A) IL-1 $\beta$ , (B) IL-6, and (C) smiDC viability were examined by ELISA and mitochondrial dehydrogenase activity, respectively. Data are expressed as the mean  $\pm$  SD of replicates. Representative of three independent experiments. \* indicates a significant difference compared to non-treated controls,  $p < 0.05$ . (D) The percent increase in IL-1 $\beta$  and IL-6 normalized to PBS treated controls (dashed line at 0). Each dot represents an individual experiment. \* indicates a significant difference between the indicated groups,  $p < 0.05$ .



**Supplemental Figure 2.** SmiDCs express P2X7R. SmiDCs were stained with HLA-DR-, Langerin-, and P2X7R-Abs and first gated on live cells in the FSC vs SSC then on HLA-DR<sup>+</sup> cells. Numbers represent the percent positive within the respective quadrant.



**Supplemental Figure 3.** IL-17 secretion is significantly increased by naïve T cells stimulated by CD3/CD28 beads in the presence of BzATP. Naïve T cells were stimulated with CD3/CD28 beads for 72 h in the presence of BzATP, KN-62, or vehicle control (-). T cells alone are negative controls. (A) IL-17 secretion and (B) percent increase in T cell proliferation compared to T cells alone were determined by ELISA and mitochondrial dehydrogenase activity, respectively. Bars represent the means  $\pm$  SD from triplicates. \* indicates a significant difference,  $p < 0.05$ , compared to vehicle control. N.D.=non-detected. Representative of three independent experiments.

**Supplemental Table I. IL-17 concentrations**

	<b>T cells</b>	<b>DC + T cells</b>	<b>BzATP</b>	<b>KN-62</b>	<b>BzATP + KN-62</b>
Exp 1	N.D. <sup>a</sup>	63.9 ± 9.7 <sup>b</sup>	<b>101.4 ± 1.3<sup>c</sup></b>	<u>17.5 ± 2.8</u>	
Exp 2	9.7 ± 0.8	720.0 ± 64.5	565 ± 17.5	<u>202.7 ± 6.2<sup>d</sup></u>	
Exp 3	62.6 ± 7.3	248.5 ± 18.0	112.7 ± 7.2	<u>112.5 ± 11.3</u>	
Exp 4	13.4 ± 0.5	66.7 ± 1.0	23.4 ± 1.1	<u>14.8 ± 2.0</u>	
Exp 5	2.8 ± 1.8	1494 ± 0.9	<b>1857 ± 153.7</b>	e	
Exp 6	N.D.	585.3 ± 54.9	<b>639 ± 14.6</b>		
Exp 7	N.D.	19.03 ± 0.8	N.D.	<u>11.4 ± 0.5</u>	
Exp 8	N.D.	15.3 ± 2.3	<b>39.773 ± 3.1</b>	18.08 ± 2.2	
Exp 9	23.9 ± 5.1	277.0 ± 3.5	<b>489.2 ± 11.7</b>	327.0 ± 9.0	315.5 ± 8.4
Exp 10	30.1 ± 8.9	698.1 ± 15.6	<b>1306.2 ± 37.9</b>	<u>431.7 ± 18.4</u>	800.0 ± 56.0
Exp 11	1.5 ± 0.94	3.8 ± 1.5	<b>19.7 ± 4.0</b>	<u>1.9 ± 1.2</u>	13.9 ± 2.8

<sup>a</sup> N.D.= non-detected

<sup>b</sup> 5-day MLC. Supernatants assessed by IL-17-specific ELISA. Mean of replicates ± 1 S.D.

<sup>c</sup> Bold values highlight an increase in IL-17 following BzATP treatment

<sup>d</sup> Underlined values highlight a decrease in IL-17 following KN-62 treatment

<sup>e</sup> Empty well indicates treatment was not performed.