Supplemental Figure 1. FITC-conjugated LTA and DBA lectin staining of primary NK cells, DBA$^+$-NK$^{\text{TERT}}$ cells, and DBA$^+$-PKD$^{\text{TERT}}$ cells. Scale bar, 20 $\mu$m.

Supplemental Figure 2. DNA sequence profile of the region surrounding codon Q4004 in the PKD1 gene of the LTA$^+$-PKD$^{\text{TERT}}$ cell clone studied functionally in this work. Heterozygosity for the amber codon TAG is bracketed. The C to T transition is marked with an asterisk.

Supplemental Figure 3. X-Y immunolocalization image of PC2 in DBA$^+$-NK$^{\text{TERT}}$ and DBA$^+$-PKD$^{\text{TERT}}$ cells at plane of cilia. Scale bars, 10 $\mu$m.

Supplemental Figure 4. X-Y immunolocalization of PC1 and PC2 in LTA$^+$-NK$^{\text{TERT}}$ and LTA$^+$-PKD$^{\text{TERT}}$ cells at plane of nucleus. Scale bars, 20 $\mu$m.

Supplemental Figure 5. [Ca$^{2+}$]$_i$ responses to the purinergic receptor agonists UTP, ADP, and ATP in NK and ADPKD cyst cells. A,B. Concentration-dependent responses to UTP, ATP, and ADP by primary NK cells (A) and by primary ADPKD $\Delta$L2433 cells (B). C,D. [Ca$^{2+}$]$_i$ responses to 10 $\mu$M ATP, UTP, and ADP in LTA$^+$-NK$^{\text{TERT}}$ and LTA$^+$-PKD$^{\text{TERT}}$ cells (C) and in DBA$^+$-NK$^{\text{TERT}}$ and DBA$^+$-PKD$^{\text{TERT}}$ cells (D). The commercial preparations of nucleotides used were of limited purity (>90% for UTP, >95% for ADP).

Supplemental Figure 6. RT-PCR analysis of CD39 family mRNA expression in NK and ADPKD cells. A. RT-PCR analysis of expression levels of mRNAs encoding the ectonucleotidases CD39, CD39L2, CD39L3 and CD39L4 in LTA$^+$-NK (NL) and LTA$^+$-PKD cells (PL), in DBA$^+$-NK (ND) and DBA$^+$-PKD cells (PD), and in human kidney (K). Fusion of two gels (junction between CD39L3 and L2), aligned by the size markers at left. B. Summary of 3 similar experiments in which values are means ± s.e.m; **, P < 0.01; *, P < 0.05.

Supplemental Figure 7. Immunostaining with anti-CD39 antibody shows lower
intensity in LTA⁺-PKD_{TERT} cells than in LTA⁺-NK_{TERT} cells. Scale bar, 5 μm.