Supplementary Figure Legends

Supp. Figure S1. Host CD73 promotes MCA-induced tumors and can be targeted for therapy. A-B. Groups of 20-39 male WT and CD73−/− mice were injected subcutaneously with 100 μg (A), or 25 μg (B) MCA and monitored for tumor development over 300 days. Kaplan-Meier survival curves of mice in each group are shown. MCA doses are in parentheses. P values between WT and CD73−/− mice were determined by Log Mantel Cox test. C-D. Groups of 15 male WT mice were injected s.c. with 400 μg MCA and treated with 100 μg control Ig (C) or 100 μg anti-CD73 mAb (D) injected i.p biweekly from palpable tumor formation (day 77-105) for 6 weeks. Individual tumor growth curves are shown.

Supp. Figure S2. CD73 is expressed on tumor-infiltrating lymphocytes and heterogeneously expressed on MCA-induced fibrosarcomas. Tumor cell lines were established from WT mice injected s.c with MCA and analysed by flow cytometry for CD73 expression (red: isotype control; blue: CD73 expression).

Supp. Figure S3. CD73 is expressed on MCA tumor-infiltrating lymphocytes. WT male mice injected s.c. with 100 μg MCA were analysed by flow cytometry for CD73 expression in tumor-infiltrating immune cells and splenocytes at the time of sacrifice. A. CD73 expression profiles in NK cells (NK1.1+TCRβ−), CD8+ T cells (CD8+TCRβ+) and CD4+ T cells (CD4+TCRβ+). B. CD73 expression profiles in Foxp3+ and Foxp3- CD4+ T cells. C. CD73 expression profiles in CD11c+ and CD11b+ myeloid cells (CD3-CD19-CD45.2+ gated).
**Supp. Figure S4. CD73 is expressed in TRAMP prostate tumors.** Spontaneous prostate tumor arising in CD73^+/+^ TRAMP transgenic mice (A-B) and CD73^-/-^ TRAMP transgenic mouse (C-D) were analysed by immunohistochemistry (IHC) for CD73 expression (A and C) at 20 weeks of age. DAPI staining was performed simultaneously (B and D).

**Supp. Figure S5. CD73-deficient mice have increased CD8-dependent anti-tumor immunity.** WT and CD73^-/-^ male mice were injected s.c. with 5 x 10^5^ TRAMP-C1 tumor cells and received either 100 μg control Ig (cIg) or 100 μg anti-CD8β mAb (clone 53.5.8), 100 μg anti-CD4 mAb (clone GK1.5) and/or 100 μg anti-asialo GM1 i.p. on days 0, 7, 14 and 21 (means of 5 mice per group ± SEM are shown, *: P < 0.05 compared to cIg).