Supplemental Figure Legends

Fig. S1. ITC measurement for the titration of EGCG into Pin1. The raw data are shown as injection profile (top panel) and the calorimetric binding isotherm (bottom panel). The *y* axis is the normalized heat of binding for each injection of ligand (axis *x*). The curve through the points represents the independent binding model provided by NanoAnalyze software (www.tainstruments.com). The association constant (Ka) was obtained as 0.046×10^6 M^{-1} and the dissociation constant Kd was calculated as 21.6 μM.

Fig. S2. EGCG structure and electron density maps. (A) Chemical structure of EGCG. **(B, C)** Representative sigma-A weighted 2Fo-Fc omit electron density maps for EGCG contoured at 1.0 σ: **(B)** In WW Pin1 domain; **(C)** In PPIase Pin1 domain. Produced with PyMOL (http://www.pymol.org).

Fig. S3. EGCG has no effect on isomerase activity in Pin1KO or Neu/Pin1 KO MEFs. (A) Pin1KO, **(B)** Neu/Pin1 KO, **(C)** Neu/Pin1 KO + mock, or **(D)** Neu/Pin1KO + Pin1R17A cells were treated for 24 h with different concentrations of EGCG (0, 10, 15, 20, 25 μM) and data are represented as means ± S.D. from 3 independent experiments.

Fig. S4. Determination of the inhibitor constants for EGCG by a graphical method . **(A)** Vmax was determined from the double-reciprocal plot as 1/V as a function of 1/S for different concentrations of EGCG**. (B)** The Ki value for purified Pin1 (*in vitro*) was determined from the negative of the x-axis value at the point of

intersection of the plot for a substrate peptide concentration of 20 μM with the plot at V = Vmax and was 20 μM. The Ki values for **(C)** Pin1WT, **(D)** Neu/Pin1 WT, and **(E)** Neu/Pin1KO + Pin1 MEFs lysates (*ex vivo*) were determined by the same method and were 45, 48, and 50 μM, respectively.

Fig. S5. EGCG does not interact with the FK506-binding protein (FKBP) or human cyclophilin A. **(A)** *In vitro* pull-down assay using CNBr-activated Sepharose 4B matrix with or without EGCG. **(B)** The expression level of FKBP and cyclophilin A in cells highly expressing Pin1 and Pin1KO and Neu/Pin1KO cells.

Fig. S6. EGCG inhibits tumor growth of HCT116 cells that express high levels of Pin1. Athymic nude mice were treated as described in "Supplemental Methods" and tumor volume was measured and recorded twice a week. Data are shown as means ± S.E. and the asterisk (*) indicates a significantly ($p < 0.05$) smaller tumor volume in EGCG-treated mice compared to vehicle treated controls.