Figure S1. NFV suppresses T-ALL cell viability. Representative dot plot of Jurkat and Molt4 cells. T-ALL cells were treated with 0.1% D or NFV for 16 h. Cell viability assays were performed. Cells that were negative for both Annexin V and propidium iodide stains were considered viable (red box). T-ALL, T cell acute lymphoblastic leukemia; NFV, nelfinavir; D, DMSO.

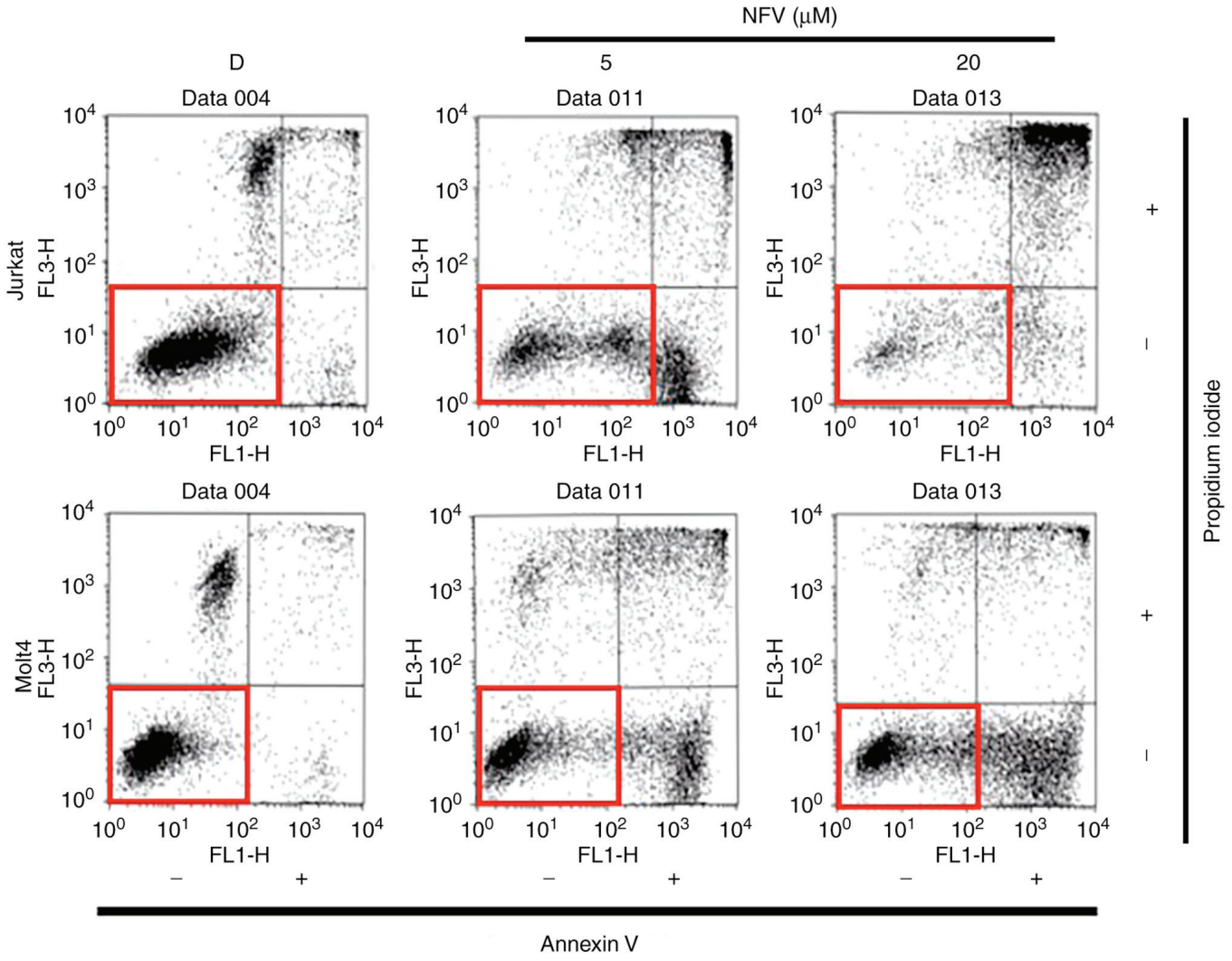

Figure S2. NFV inhibits NOTCH1 and mTOR pathway signaling and induces endoplasmic reticulum stress in a time-dependent manner. Jurkat cells were treated with 0.1% D, 20 μM NFV or 100 nM R. Immunoblotting analyses were performed. NICD, NOTCH1 intracellular domain; p-eIF2α (S51), phosphorylated eukaryotic initiation factor 2 α subunit at Ser51; p-S6 (S235/236), phosphorylated S6 ribosomal protein at Ser235/236; NFV, nelfinavir; D, DMSO, R, rapamycin.

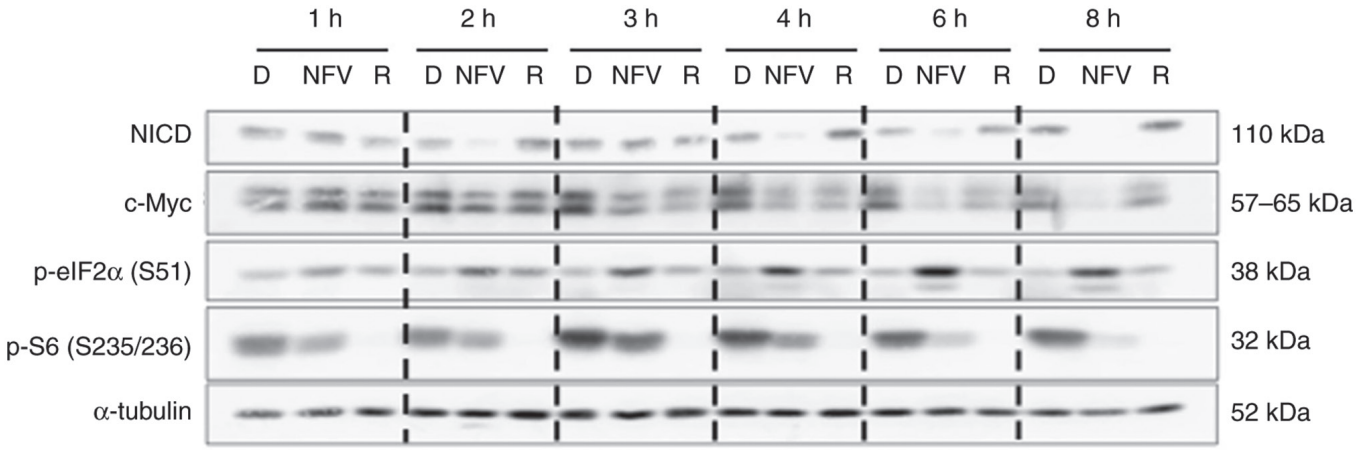

Figure S3. NFV increases CHAC1 expression and inhibits the mTOR pathway. (A) NFV increases p-eIF2α (S51) and CHAC1 expression. (B) NFV increases p-eIF2α (S51) and decreases p-S6 (S235/236). *P<0.05. p-eIF2α (S51), phosphorylated eukaryotic initiation factor 2 α subunit at Ser51; p-S6 (S235/236), phosphorylated S6 ribosomal protein at Ser235/236; NFV, nelfinavir; D, DMSO, R, rapamycin; CHAC1, ChaC glutathione-specific gamma-glutamylcyclotransferase 1.

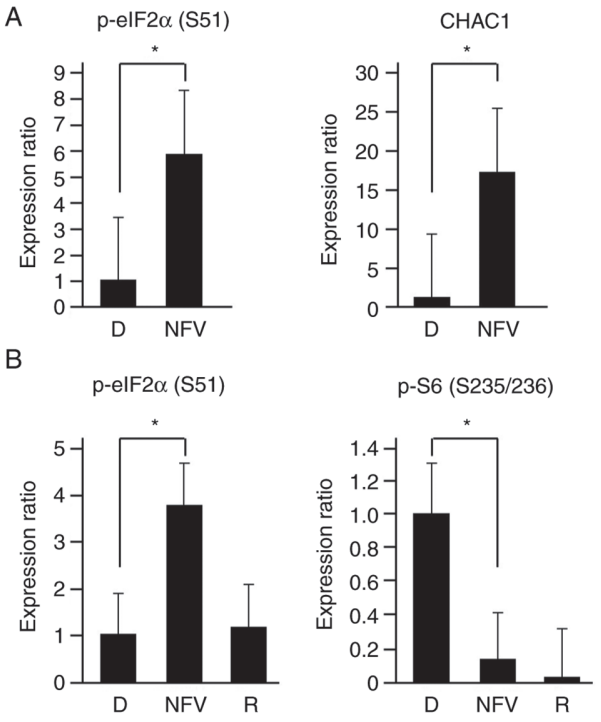

Figure S4. NFV decreases T cell malignant tumor burden in *SCL-LMO1* transgenic mice. Mice were treated with 100 mg/kg NFV intraperitoneally daily for 2 weeks and showed tumor regression. The mice were scanned via micro-computed tomography before and after NFV treatment. Red arrowhead, thymic tumor; red arrow, lymphadenopathy. H, heart; NFV, nelfinavir.

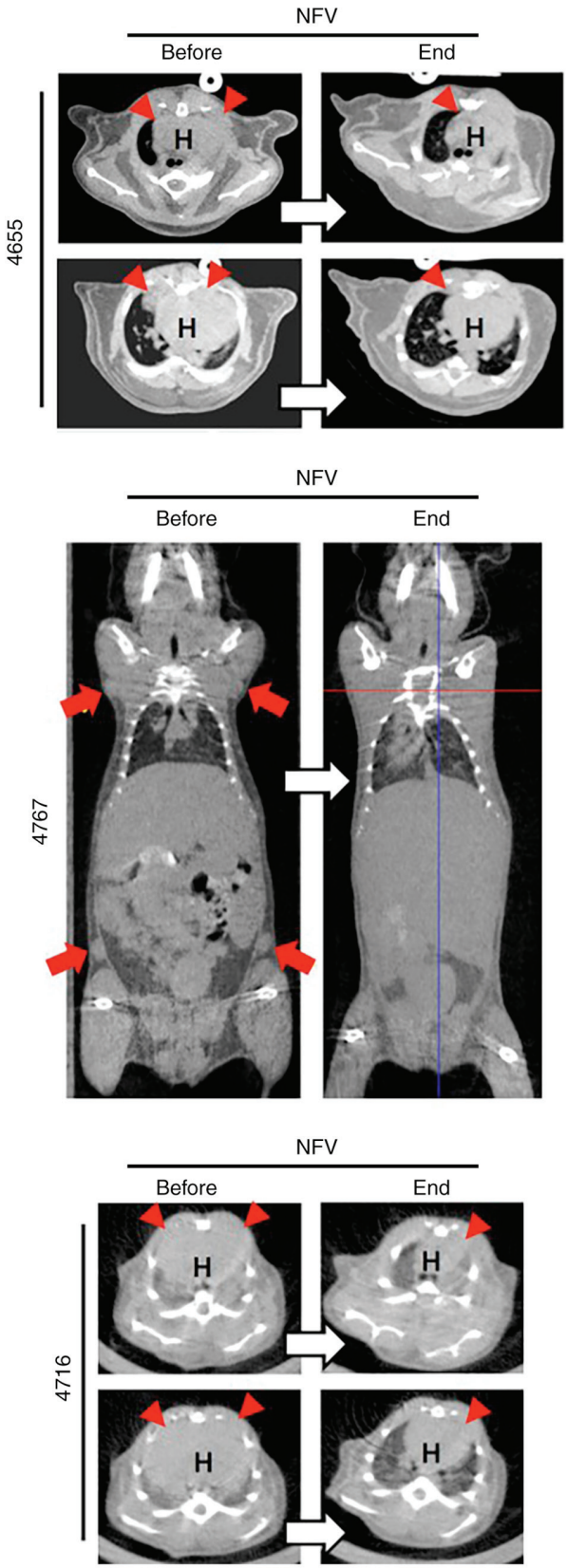

Figure S5. NFV-withdrawal study in *SCL-LMO1* transgenic mice. Representative micro-computed tomography images of mouse nos. 4830, 4882 and 4878 are shown. Daily treatment with 100 mg/kg NFV intraperitoneally for 2 weeks decreased tumor burden (red arrowhead, thymic tumor). H, heart; NFV, nelfinavir.