**Supplemental Figure 1:** Dose response of mTORi or CNI on alloantibody production and allograft survival.

_A_ To examine the effect of mTORi or CNI in high alloantibody producing transplant recipients, C57BL/6 (H-2<sup>b</sup>, wild-type; WT) mice were transplanted with allogeneic FVB/N (H-2<sup>a</sup>) hepatocytes and CD8-depleted (days -2, -1). On days 0-14 posttransplant cohorts of recipients were treated with 1-5 mg/kg/d mTORi or CNI or a 5% DMSO-vehicle control. 

A) Alloantibody was quantified by titering recipient serum on day 14 posttransplant. Treatment of recipients with as low a dose of mTORi as 0.25 mg/kg/d resulted in significantly reduced alloantibody (titer=64±16, n=5, p<0.001 for all comparisons as signified by “**”) compared to control recipients (titer=263±55, n=4). Additionally the dose of mTORi inversely correlated with alloantibody level (alloantibody titer for 1.0 mg/kg/d=28±8, n=4; 2.5 mg/kg/d=19±4, n=4; 5.0 mg/kg/d=17±4, n=3, p<0.001 for all). CNI treatment did not inhibit alloantibody production even at the highest dose tested (5 mg/kg/d=150±29, n=4). Data was combined from duplicate experiments.

_B_ To examine the effect of mTORi or CNI on allograft survival, CD8-depleted C57BL/6 recipients were treated on days 0 through 14 with 1-5 mg/kg/d mTORi or CNI or a 5% DMSO-vehicle control. Treatment with mTORi at 2.5 mg/kg/d significantly delayed graft rejection (MST>42 days, n=3) compared with CNI-treated groups (1 mg/kg/d: MST=12 days, n=6 and 2.5 mg/kg/d: MST=18 days, n=4) and DMSO treated controls (MST=14 days, n=15). p=0.04 for 2.5 mg/kg/day mTORi-treated versus all CNI and DMSO treated groups as signified by “†”. mTORi at 1 mg/kg/d also significantly delayed graft rejection (MST=25 days, n=8) compared to DMSO and CNI at 1 mg/kg/d (p<0.04 for both comparisons, as signified by “*”) but not when compared to the CNI 2.5 mg/kg/d group (p=ns). Treatment with CNI at the highest doses (2.5 mg/kg/d) did not delay rejection (MST=18 days, n=4) compared with DMSO treated controls (p=ns).