



Supplemental Figure 1: mTOR inhibition by rapamycin blunts cell-cycle entry in response to acute CaOx crystal deposition in wild-type rats.

Time course of Ki-67 expression of wild-type rats treated with sodium oxalate and rapamycin. (Scale bar= 50 μ m).

	Male		Female		p value	
	Control, 0.6%P (n=10)	HPD, 1.2%P (n=10)	Control, 0.6%P (n=10)	HPD, 1.2%P (n=10)	Diet	Gender
Body Weight (g)	387±20	345±12	245±13	228±8	<0.0001	<0.0001
Kidney Weight (g)	3.62±0.50	4.95±1.48	2.51±0.31	4.72±0.48	<0.0001	<0.0001
Kidney Weight (%BW)	0.94±0.14	1.44±0.44	1.02±0.10	2.08±0.22	<0.0001	0.0148
Kidney Cyst Score (%)	12.1±3.3	16.1±4.8	11.2±4.4	21.5±4.7	<0.0001	0.3784
Kidney Fibrosis Score (%)	3.2±1.6	6.6±2.0	3.8±1.5	12.3±2.1	<0.0001	0.1557
Renal Calcium deposits (%)	0.03±0.03	0.33±0.24	0.66±0.25	1.28±0.59	<0.0001	<0.0001
Serum Creatinine (mg/dl)	0.49±0.05	0.48±0.07	0.49±0.04	0.52±0.05	0.0127	0.0626
Serum BUN (mg/dl)	27.8±3.6	30.2±7.6	29.3±3.2	38.8±5.4	0.0026	0.1178
Serum Phosphorous (mg/dL)	8.9±1.1	7.5±2.6	9.9±0.4	7.7±1.0	0.0001	0.3699
Serum Calcium (mg/dL)	10.2±0.6	10.3±0.4	10.0±0.3	10.1±0.3	<0.0001	0.3163
Urine Creatinine (mg/dl)	94±55	128±39	88±34	132±32	<0.0001	0.7343
Urine Creatinine (mg/24hrs)	8.6±0.7	9.1±1.6	5.9±1.1	5.7±1.5	0.0011	<0.0001
Urine Phosphorous (mg/dl)	161±50	328±73	168±68	320±68	<0.0001	0.9852
Urine Phosphorous (mg/24hrs)	17.6±2.2	25.1±9.1	11.3±2.5	14.3±4.9	<0.0001	<0.0001
Urine Phosphorous (mg/g Creat)	2045±202	2720±683	1907±190	2486±463	<0.0001	0.185
Urine Phosphorous (mg/24hrs/100g BW)	4.6±0.6	7.3±2.6	4.6±0.9	6.3±2.2	0.0004	0.4406
Urine Calcium (mg/dl)	36.4±24.2	67.5±31.5	44.4±17.9	51.0±19.9	<0.0001	0.7571
Urine Calcium (mg/24hrs)	3.3±0.7	4.6±1.3	3.0±0.4	2.3±0.9	<0.0001	0.623
Urine Calcium (mg/g Creat)	383±78	520±155	512±95	388±99	<0.0001	0.8066
Urine Calcium (mg/24hrs/100g BW)	0.85±0.18	1.35±0.39	1.22±0.20	1.00±0.43	<0.0001	0.6291
24 hrs Urine (ml)	11.2±4.4	8.4±5.0	8.0±3.9	4.8±2.3	0.0068	0.0537
Systolic BP(mmHg)	116±5	140±4	118±5	132±5	<0.0001	0.2316
Liver Weight (g)	16.2±1.3	14.5±1.5	10.3±0.5	9.8±0.3	<0.0001	<0.0001
Liver Weight (%BW)	4.18±0.22	4.21±0.34	4.19±0.14	4.29±0.23	<0.0001	0.2177
Liver Cyst Score(%)	5.6±3.0	6.2±1.7	5.7±2.5	7.1±1.3	0.2568	0.3742
Liver Fibrosis score (%)	3.9±0.8	3.1±1.0	4.9±0.8	5.0±1.1	0.0145	0.0001

Supplemental Table 1: Main laboratory parameters in male and female PCK rats by phosphate content diet. HPD parameters in both male and female PCK rats. Means ± SD. P-values for diet and gender effects using a two-way analysis of variance (ANOVA).