

**Table S2** Summary of major results.

|  | 2d                |                    | 7d                |                    |
|--|-------------------|--------------------|-------------------|--------------------|
|  | Vehicle           | Sirolimus          | Vehicle           | Sirolimus          |
| <b>Functional phosphate studies</b>                      |                   |                    |                   |                    |
| Serumphosphate (mmol/l)                                  | <u>3.3 ± 0.09</u> | <u>2.8 ± 0.05†</u> | <u>3.0 ± 0.08</u> | <u>2.4 ± 0.09‡</u> |
| Urine phosphate/creatinine ratio                         | <u>12.4 ± 0.6</u> | <u>17.8 ± 0.7‡</u> | <u>10.4 ± 1.1</u> | <u>15.8 ± 0.9†</u> |
| TmP/GFR (mmol/l)   | <u>3.0 ± 0.1</u>  | <u>2.5 ± 0.06‡</u> | <u>2.8 ± 0.06</u> | <u>2.1 ± 0.09‡</u> |
| BBMV phosphate uptake (pmol/mg)                          | <u>1091 ± 77</u>  | <u>1030 ± 129</u>  | <u>1145 ± 126</u> | <u>1158 ± 32</u>   |
| <b>Phosphatonins</b>                                     |                   |                    |                   |                    |
| PTH (pg/ml)  | <u>403 ± 37</u>   | <u>177 ± 35†</u>   | 334 ± 44          | 193 ± 31*          |
| FGF 23 (pg/ml)   | <u>259 ± 15</u>   | <u>267 ± 21</u>    | <u>249 ± 20</u>   | <u>144 ± 12‡</u>   |
| Klotho (pg/ml)   | 466.5 ± 134.6     | 592.6 ± 164.5      | 1110.8 ± 264.1    | 809.1 ± 177.3      |
| 1,25 Dihydroxycholecalciferol (pg/ml)                    | 123 ± 11          | 155 ± 9            | 131 ± 12          | 178 ± 20           |
| <b>Transcription</b>                                     |                   |                    |                   |                    |
| qPCR NaPi IIa (2 <sup>Δ</sup> <sup>HPRT-NaPi IIa</sup> ) | 1 ± 0.05          | 0.9 ± 0.03         | 1 ± 0.05          | 0.9 ± 0.03         |
| qPCR NaPi IIc (2 <sup>Δ</sup> <sup>HPRT-NaPi IIc</sup> ) | 1 ± 0.05          | 0.6 ± 0.05‡        | 1 ± 0.04          | 0.6 ± 0.05‡        |
| qPCR Pit-2 (2 <sup>Δ</sup> <sup>HPRT-Pit2</sup> )        | 1 ± 0.09          | 1 ± 0.08           | 1 ± 0.1           | 1.4 ± 0.2          |
| qPCR Klotho (2 <sup>Δ</sup> <sup>18S-Klotho</sup> )      | 1 ± 0.19          | 0.75 ± 0.19        | 1 ± 0.13          | 0.7 ± 0.15         |
| qPCR NHE3 (2 <sup>Δ</sup> <sup>HPRT-NHE3</sup> )         | 1 ± 0.2           | 1 ± 0.1            | 1 ± 0.1           | 1.3 ± 0.2          |
| <b>Translation</b>                                       |                   |                    |                   |                    |
| WB NaPi IIa (Actin/NaPi IIa Ratio)                       | 1 ± 0.1           | 1.1 ± 0.07         | 1 ± 0.1           | 1 ± 0.1            |
| WB NaPi IIc (Actin/NaPi IIc Ratio)                       | 1 ± 0.1           | 0.8 ± 0.07         | 1 ± 0.2           | 0.7 ± 0.1          |
| WB Pit-2 (Actin/Pit-2 Ratio)                             | 1 ± 0.1           | 1 ± 0.08           | 1 ± 0.2           | 0.9 ± 0.07         |
| WB Klotho (Actin/Klotho Ratio)                           | 1 ± 0.26          | 0.6 ± 0.09         | 1 ± 0.25          | 0.7 ± 0.15         |
| WB NHE3 (Actin/NHE3 Ratio)                               | 1 ± 0.2           | 1.3 ± 0.2          | 1 ± 0.06          | 0.9 ± 0.1          |
| IHC NaPi IIa   |                   | No difference      |                   | No difference      |
| IHC NaPi IIc   |                   | No difference      |                   | No difference      |
| IHC Pit-2  |                   | No difference      |                   | No difference      |

Values are means ± SE, n = 6/group. A summary of all major results from rats treated with vehicle and sirolimus for two and seven days is shown. \*p < 0.05. †p < 0.01. ‡p < 0.001.