

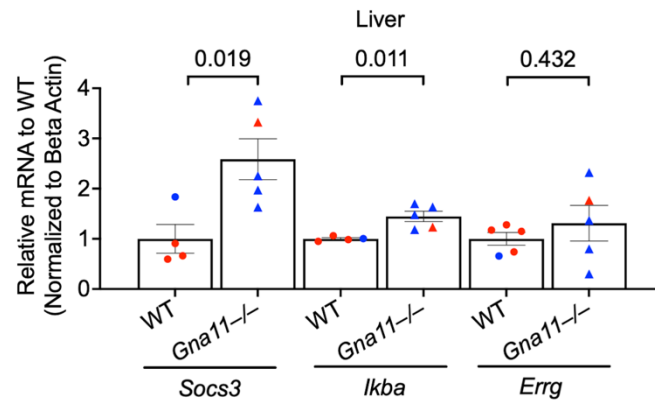
## **Supplementary Information**

### **G $\alpha_{11}$ deficiency increases fibroblast growth factor-23 levels in a mouse model of Familial Hypocalciuric Hypercalcemia**

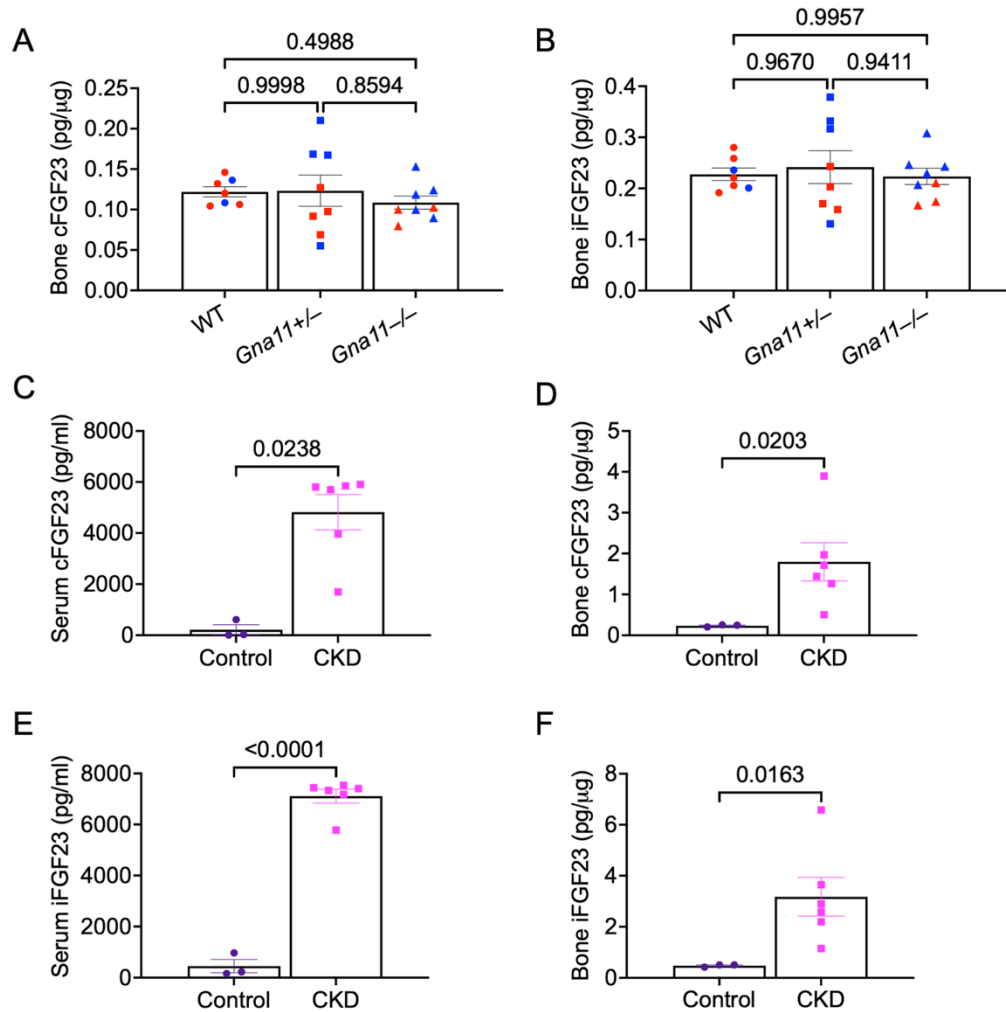
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**Supplementary Table S1.** Sequences of primer pairs used in qRT-PCR.

| Gene           | Forward (5' -> 3')      | Reverse (5' -> 3')      |
|----------------|-------------------------|-------------------------|
| <i>Acta2</i>   | TGAAGAGGAAGACAGCACAGC   | GCCCATTCCAACCATTACTCC   |
| <i>Cyp24a1</i> | GTGCGGATTTCTTTGTGAT     | GGGATTCCGGGATAGATTGT    |
| <i>Cyp27b1</i> | CAAATGGCTTTGTCCCAGAT    | GGCTGTCTTCCGAATGGTTA    |
| <i>Errg</i>    | AAGATCGACACATTGATTCCAGC | CATGGTTGAACTGTAACCTCCAC |
| <i>Fam20c</i>  | GCTCATCATGACCTTCCAGA    | CGCATTGTGCCTCTCATAGT    |
| <i>Furin</i>   | GGAGCCAGTTTTGACGTGAA    | CTACGCCACAGACACCATTG    |
| <i>Galnt3</i>  | GAATTTCTCTGCACCGGGAC    | CGTGGACCATGCTTCATTGT    |
| <i>Gna11</i>   | GGTCGATGTGGAGAAGGTCA    | CCACGTCCGTCAAGTAGTACT   |
| <i>Gnaq</i>    | CAGACAATGAGAACCGCATG    | TCGACTAGGTGGGAATACATGA  |
| <i>Icam1</i>   | CTGTTTGAGCTGAGCGAGAT    | GCTCCACACTCTCCGGAAA     |
| <i>Ikba</i>    | GAAAGCTGGCTGTGATCCTG    | GCGTCAAGACTGCTACACTG    |
| <i>Il1b</i>    | AGTTGACGGACCCCAAAAGA    | GCTCTTGTTGATGTGCTGCT    |
| <i>Il6</i>     | TGAACAACGATGATGCACTTG   | ACTCCAGAAGACCAGAGGAA    |
| <i>Klotho</i>  | AGACCTCCCGATGTATGTGAC   | GTCCAACACGTAGGCTTTCA    |
| <i>Lcn2</i>    | CATTTGTTCCAAGCTCCAGGG   | CATGGCGAACTGGTTGTAGTC   |
| <i>Mcp1</i>    | AGGTGTCCCAAAGAAGCTGT    | GATCTCATTTGGTTCCGATCCA  |
| <i>Socs3</i>   | CCTCCTTTTCTTTGCCACCC    | GCTCAGTACCAGCGGAATCT    |
| <i>Tnfa</i>    | CCACCACGCTCTTCTGTCTA    | GGTCTGGGCCATAGAACTGA    |
| <i>Actb</i>    | GATCTGGCACCACACCTTCT    | GGGGTGTTGAAGGTCTCAA     |



**Supplementary Figure 1. Expression levels of cytokine target genes, *Socs3*, *Ikba*, and *Errg*, in the liver of *Gna11*<sup>-/-</sup> mice.** Two-tailed Student's t-test, mean  $\pm$  SEM, n = 4-5 mice. Blue: Males, Red: Females.



**Supplementary Figure 2. Bone FGF23 concentrations of *Gna11* KO mice along with serum and bone FGF23 measurements of CKD mice.** (A) Bone cFGF23 and (B) bone iFGF23 of *Gna11* KO mice, (C) Serum cFGF23, (D) bone cFGF23, (E) serum iFGF23, and (F) bone iFGF23 concentrations in CKD mice. A and B: One-Way ANOVA followed by Tukey's multiple comparisons, mean  $\pm$  SEM, n = 7-8 mice/group, Blue: Males, Red: Females, C-F: Two-tailed Student's t-test, mean  $\pm$  SEM, n = 3-6 mice/group.