**Supplemental Figure S1:** Sequence alignment of FIP200 from different species. LQFL motif is shaded by blue.

**Supplemental Figure S2:** PCR (A) and DNA sequence analysis of DNA from $FIP200^{+/+}$, $FIP200^{+/KI}$ and $FIP200^{KI/KI}$ mice.

**Supplemental Figure S3:** TUNEL and DAPI staining of the liver and heart sections from various embryos at E16.5. Scale bars= 100 μm.
| Species            | Length | Sequence                        |
|--------------------|--------|---------------------------------|
| RBCC1_HUMAN        | 573    | ELPDISLKDQLQFLQSFCPSEVQPFLRVP   |
| RBCC1_MOUSE        | 572    | ELPDISLKDQLQFLQSFCPSEVQPFLRVP   |
| D3ZHK4_RAT         | 572    | ELPDISLKDQLQFLQSFCPSEVQPFLRVP   |
| E1BH45_BOVIN       | 572    | ELPDISLKDQLQFLQSFCPSEVQPFLRVP   |
| I3LG34_PIG         | 567    | ELPDISLKDQLQFLQSFCPSEVQPFLRVP   |
| E2RCK4_CANLF       | 572    | ELPDISLKDQLQFLQSFCPSEVQPFLRVP   |
| GITBJ8_RABBIT      | 569    | ELPDISLKDQLQFLQSFCPSEVQLLRVP    |
| E1C330_CHICK       | 575    | ELPDISLSDLQFLQSFCPSEVQLLRVP     |
| E7FFM2_DANRE       | 573    | ELPDISLSDLQYLKSCCPSEVQPYLRVP    |
**A**

P1 vs P2

| KI/KI | KI/+ | +/- |
|-------|------|-----|

KI allele

WT allele

**B**

| +/+ | KI/+ | KI/KI |
|-----|------|------|

L582 Q583 F584 L585

G C A G C G G C T G C T

A582 A583 A584 A585
