

Figure S1 Identification and confirmation of the floxed *LCMR1* allele. (A) Representative agarose gel electrophoresis image of the PCR product amplified for genotyping. *LCMR1*^{flox/wt} mice exhibited 4.4-kb (left panel) and 4.6-kb bands (right panel) produced by the floxed *LCMR1* allele. (B) Sanger sequencing result of the above PCR products from a *LCMR1*^{flox/wt} mouse. (C) Southern blot analysis confirmed the correct insertion of the two loxP sites. The expected fragment size of gDNA hybridized with the 5' Probe (left panel): 15.23 kb (WT) and 11.64 kb (floxed allele); 3' Probe (right panel): 8.62 kb (WT) and 5.56 kb (floxed allele). Wt, wide type. PCR, polymerase chain reaction.

Table S1 Primers for PCR

| Primer sequence | Product size, bp |
|--------------------------------------|---------------------|
| LCMR1 ^{flox} (5'-loxP site) | Flox (265)/WT (198) |
| Forward: CACTGCCTCCCAAGTGAGTGCTG | |
| Reverse: CCCCAATGACCACACATAATCCTTC | |
| LCMR1 ^{flox} (3'-loxP site) | Flox (289)/WT (214) |
| Forward: ACATGAGTGCAGTATCCTGAGGC | |
| Reverse: AAATAGAAGCAGAAGCACTACAAAC | |
| LCMR1 ^{ΔAT2} | Knockout (192) |
| Forward: CACTGCCTCCCAAGTGAGTGCTG | |
| Reverse: AAATAGAAGCAGAAGCACTACAAAC | |
| Sftpc-CreER ^{T2} | Cre (210)/WT (327) |
| Forward: TGCTTCACAGGGTCGGTAG | |
| Reverse 1: ACACCGGCCTTATTCCAAG | |
| Reverse 2: CATTACCTGGGGTAGGACCA | |

Table S2 Primers for quantitative RT-PCR

| Gene | Forward primer | Reverse primer |
|---------|-------------------------|---------------------------|
| LCMR1 | CGATCCCTCATTGAGAAGCCT | TATGCATCAGACGACACTGCTC |
| SP-A | CTGTCCCAAGGAATCCAGAG | CCGTCTGAGTAGCGGAAGTC |
| SP-B | TGTGCCAAGAGTGTGAGGAT | CAGGGGCAGGTAGACATCAA |
| SP-C | ACATGAGTGCAGTATCCTGAGGC | AAATAGAAGCAGAAGCACTACAAAC |
| SP-D | AAGGTCCACGGGGTGAGAA | TTTGCCTTGAGGTCCTATGTTC |
| β-actin | CCTGGGCATGGAGTCCTGTG | TCTTCATTGTGCTGGGTGCC |