**Supplementary Table S4.** Statistically over-represented TFBS motifs identified within the promoter regions of the genes within cluster 65.

| Motif <sup>a</sup> | Family            | Raw score <sup>b</sup> | <i>P</i> value <sup>c</sup> | Promoters containing<br>TFBS motif |
|--------------------|-------------------|------------------------|-----------------------------|------------------------------------|
| Broad-complex 1    | Zinc finger, C2H2 | 15.4                   | 0.003                       | Ascl2, Ccl20, Cftr,                |
| 1                  |                   |                        |                             | Es31, Fgf15, Fgfr4,                |
|                    |                   |                        |                             | Gm4738, Kcnj15,                    |
|                    |                   |                        |                             | Mycl1, Ubd                         |
| NFYA               | CAAT-box          | 10.2                   | 0.001                       | Ascl2, Calcb, Cftr,                |
|                    |                   |                        |                             | Es31, Gp2, Gm4738,                 |
|                    |                   |                        |                             | Rps6kl1                            |
| REL                | NF-κB             | 7.74                   | 0.001                       | Ccl20, Cftr, Clca2,                |
|                    |                   |                        |                             | Fgfr4, Gpr133, Kcna1,              |
|                    |                   |                        |                             | Psg18, Rps6kl1, Ubd                |
| Dl 2               | REL               | 7.43                   | 0.002                       | Ccl20, Cftr, Clca2,                |
|                    |                   |                        |                             | Fgfr4, Kcna1, Kcnj15,              |
|                    |                   |                        |                             | Psg18, Ubd                         |
| NF-κB              | NF-κB             | 6.87                   | 0.001                       | Ccl20, Clca2, Fgfr4,               |
|                    |                   |                        |                             | Gpr133, Kcnal, Psg18,              |
|                    |                   |                        |                             | Ubd                                |
| NHLH1              | bHLH              | 6.3                    | 0.001                       | <i>Gpr133, Gm4738,</i>             |
|                    |                   |                        |                             | Gulo, Ubd                          |
| RELA               | NF-κB             | 5.99                   | 0.001                       | Ccl20, Clca2, Fgfr4,               |
|                    |                   |                        |                             | Kcnal, Psg18, Ubd                  |
| HNF1a              | Homeobox          | 3.87                   | 0.002                       | Es31, Gm4738, Kcnj15               |
| TBP                | TATA-box          | 3.63                   | 0.008                       | Anxa10, Calcb, Ccl20,              |
|                    |                   |                        |                             | Fgf15, Gp2, Gpr133,                |
|                    |                   |                        |                             | Gm4738, Mycl1                      |
| Sox17              | HMG               | 3.28                   | 0.002                       | Ascl2, Kcnj15, Mycl1,              |
|                    |                   |                        |                             | Psg18                              |
| Sox9               | HMG               | 1.66                   | 0.01                        | Ascl2, Ccl20, Kcnj15,              |
|                    |                   |                        |                             | Mycl1, Psg18                       |

<sup>a</sup>, Data are presented in order of clover score, with the highest score (most

thermodynamically stable pairing) first.

<sup>b</sup>, Quantifies the degree of over-representation of motifs when compared to the background set of all mouse promoters.

<sup>c</sup>, Probability of obtaining the raw score by chance. Values calculated by randomly sampling the background set of all mouse promoters.