

Table 1. Differential expression of genes between *Parp-1<sup>+/+</sup>* and *Parp-1<sup>-/-</sup>* ES cells, livers, and EFs

| <i>p</i> -value cut off <sup>a</sup> | No. of genes |                                                             |                   |                                                             |                   |
|--------------------------------------|--------------|-------------------------------------------------------------|-------------------|-------------------------------------------------------------|-------------------|
|                                      | Total        | <i>Parp-1</i> <sup>-/-</sup> < <i>Parp-1</i> <sup>+/+</sup> |                   | <i>Parp-1</i> <sup>-/-</sup> > <i>Parp-1</i> <sup>+/+</sup> |                   |
|                                      |              | Total                                                       | 2-fold or greater | Total                                                       | 2-fold or greater |
| <i>ES cells</i> <sup>c</sup>         |              |                                                             |                   |                                                             |                   |
| Total <sup>b</sup>                   | 9,907        | 5,464                                                       | 1,283             | 4,349                                                       | 1,406             |
| <i>p</i> < 0.05 <sup>b</sup>         | 2,273        | 1,609                                                       | 626               | 664                                                         | 324               |
| <i>p</i> < 0.01 <sup>b</sup>         | 928          | 684                                                         | 259               | 244                                                         | 120               |
| <i>Livers</i> <sup>d</sup>           |              |                                                             |                   |                                                             |                   |
| Total <sup>b</sup>                   | 12,353       | 7,138                                                       | 1,184             | 4,860                                                       | 1,038             |
| <i>p</i> < 0.05 <sup>b</sup>         | 1,616        | 1,190                                                       | 253               | 426                                                         | 158               |
| <i>p</i> < 0.01 <sup>b</sup>         | 641          | 515                                                         | 100               | 126                                                         | 43                |
| <i>EFs</i> <sup>e</sup>              |              |                                                             |                   |                                                             |                   |
| Total                                | 12,359       | 5,042                                                       | 707               | 7,317                                                       | 501               |
| <i>p</i> < 0.05                      | 996          | 390                                                         | 216               | 606                                                         | 205               |

<sup>a</sup>Analyzed by One-Way ANOVA (non-parametric test known as Wilcoxon-Mann-Whitney test)

<sup>b</sup>These genes were presented in Fig.1 (A)-(F).

<sup>c</sup>*Parp-1<sup>+/+</sup>* ES cell clone, J1 and *Parp-1<sup>-/-</sup>* ES cell clones, 210-58 and 226-47 were used.

<sup>d</sup>Two mice were used for each genotype.

<sup>e</sup>Three EFs obtained from three embryos were analyzed as triplicate experiments.