

Supplementary table

Table S1. Gene information.

| No. | Gene | Gene Symbol | Accession No. (species) | |
|-----|---------------------------------|-------------|-------------------------------------|-------------------|
| 1 | <i>IL-4</i> | Il4 | NM_021283.2 (<i>Mus musculus</i>) | |
| 2 | <i>IL-5</i> | Il5 | NM_010558.1 (<i>Mus musculus</i>) | |
| 3 | <i>IL-13</i> | Il13 | NM_008355.3 (<i>Mus musculus</i>) | |
| 4 | <i>IL-10</i> | Il10 | NM_010548.2 (<i>Mus musculus</i>) | |
| 5 | <i>TGF- β1</i> | Tgfb1 | NM_011577.2 (<i>Mus musculus</i>) | |
| 6 | <i>IL-23</i> | Il23a | NM_031252.2 (<i>Mus musculus</i>) | |
| 7 | <i>IL-31</i> | Il31 | NM_029594.1 (<i>Mus musculus</i>) | |
| 8 | <i>IFN-γ</i> | Ifng | NM_008337.4 (<i>Mus musculus</i>) | |
| 9 | <i>IL-12</i> | Il12a | NM_008351.3 (<i>Mus musculus</i>) | |
| 10 | <i>Actb</i> | Actb | NM_007393.5 (<i>Mus musculus</i>) | Reference gene |

Table S2. Comparison of ear skin thickness, mast cell counts of ear skin, small intestine and spleen weight.

| | Control | OVA | OVA+MSC | OVA+MSC CM |
|--|--------------------|--------------------|--------------------|---------------------|
| Ear skin thickness (μ M) | 264.03 \pm 10.74 | 356.13 \pm 48.39 | 346.96 \pm 28.20 | 313.20 \pm 26.53* |
| Mast cell counts of ear skin (Cells/HPF) | 3.17 \pm 1.94 | 9.00 \pm 3.81 | 6.00 \pm 5.34 | 5.33 \pm 2.61 |
| Mast cell counts of small intestine (Cells/HPF) | 1.30 \pm 1.20 | 6.00 \pm 1.28 | 3.90 \pm 1.90 | 3.5 \pm 2.30 |
| Spleen weight (g) | 0.26 \pm 0.03 | 0.39 \pm 0.05 | 0.31 \pm 0.04 | 0.33 \pm 0.04 |

Mean \pm SD. * : P < 0.05 versus G2. Cells/HPF, mast cells per high power field (x400)
MSC, mesenchymal stem cell; MSC CM, mesenchymal stem cell culture medium; OVA, Ovalbumin