CLAIMS

1. Use of *Mentha arvensis* extract in the manufacture of a medicament for treating damages of skin cells by microdust,

wherein the medicament inhibits the expression ofIL-36G (NM_019618), S100A7 (NM_002963), LCE3D (NM_032563), PTGS2 (NM_000963), and XDH (NM_000379),

wherein the *Mentha arvensis* is fermented *Mentha arvensis*,

wherein the *Mentha arvensis* extract is extracted from the leaves of *Mentha arvensis*,

wherein the fermentation is carried out by adding a microorganism of the genus *Acetobacter sp*,

wherein the microorganism of the genus *Acetobacter sp*. is *Acetobacter aceti*,

wherein the *Mentha arvensis* added with the microorganism is fermented at 22-30°C for 24-72 hours, and

wherein the *Mentha arvensis* extract is extracted with 50-90% ethanol aqueous solution.

2. The use according to claim 1,

wherein the treating damages of skin cells by microdust is at least one selected from the group consisting of treating or improving atopic dermatitis, psoriasis, and anti-inflammation.

3. Use of *Mentha arvensis* extract in the manufacture of a medicament for treating or improving atopic dermatitis or psoriasis,

wherein the medicament inhibits the expression of IL-36G (NM_019618), S100A7 (NM_002963), and LCE3D (NM_032563),

wherein the *Mentha arvensis* is fermented *Mentha arvensis*,

wherein the *Mentha arvensis* extract is extracted from the leaves of *Mentha arvensis*,

wherein the fermentation is carried out by adding a

microorganism of the genus *Acetobacter sp*,

wherein the microorganism of the genus *Acetobacter sp*. is *Acetobacter aceti*,

wherein the *Mentha arvensis* added with the microorganism is fermented at 22-30°C for 24-72 hours, and

wherein the *Mentha arvensis* extract is extracted with 50-90% ethanol aqueous solution.

4. Use of *Mentha arvensis* extract as an active ingredient in the manufacture of a medicament for anti-inflammation,

wherein the medicament inhibits the expression of PTGS2 (NM_000963),

wherein the *Mentha arvensis* is fermented *Mentha arvensis*,

wherein the *Mentha arvensis* extract is extracted from the leaves of *Mentha arvensis*,

wherein the fermentation is carried out by adding a microorganism of the genus *Acetobacter sp*,

wherein the microorganism of the genus *Acetobacter sp*. is *Acetobacter aceti*,

wherein the *Mentha arvensis* added with the microorganism is fermented at 22-30°C for 24-72 hours, and

wherein the *Mentha arvensis* extract is extracted with 50-90% ethanol aqueous solution.

5. The use according to any one of claims 1 to 4,

wherein the content of the *Mentha arvensis* extract is 0.000001 to 30% by weight based on the total weight of the medicament.

6. The use according to any one of claims 1 to 4,

wherein the medicament inhibits the expression of the genes in keratinocytes.

7. The use according to any one of claims 1 and 3 to 4, wherein the *Mentha arvensis* extract is to be administered at a dose of 10 to 500 mg/kg/day.