adipose stem cells as an active ingredient, wherein the secretion is obtained by culturing the adipose stem cell in a serum-free medium under hypoxic conditions, followed by centrifugation and filtration, and wherein 10 to 50 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be intradermally or subcutaneously injected in terms of protein abundance of the secretion per site.

[0004b]

In another aspect, the present disclosure refers to the use of a composition in the manufacture of a medicament for treating a wound, wherein the composition comprises a secretion from adipose stem cells as an active ingredient, wherein the secretion is obtained by culturing the adipose stem cell in a serum-free medium under hypoxic conditions, followed by centrifugation and filtration, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be intradermally or subcutaneously injected in terms of protein abundance of the secretion per site.

[0004c]

In another aspect, the present disclosure refers to the use of a composition in the manufacture of a medicament for improvement of hair quality, comprising a secretion from adipose stem cells as an active ingredient, wherein the secretion is obtained by culturing the adipose stem cell in a serum-free medium

under hypoxic conditions, followed by centrifugation and filtration, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be intradermally or subcutaneously injected in terms of protein abundance of the secretion per site.

[0005]

According to the present invention, the following invention is provided.

(1) A pharmaceutical composition for topical administration, for use in modifying scalp or skin, comprising a secretion from adipose stem cells as an

[Document Name] Claims

[Claim 1]

Use of a composition in the manufacture of a medicament for inducing adipocytes having 25 μm or less in diameter and tissue regeneration in scalp or skin, wherein the composition comprises a secretion from adipose stem cells as an active ingredient, wherein the secretion is obtained by culturing the adipose stem cell in a serum-free medium under hypoxic conditions, followed by centrifugation and filtration, and wherein 10 to 50 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be intradermally or subcutaneously injected in terms of protein abundance of the secretion per site.

[Claim 2]

Use of a composition in the manufacture of a medicament for treating a wound, wherein the composition comprises a secretion from adipose stem cells as an active ingredient, wherein the secretion is obtained by culturing the adipose stem cell in a serum-free medium under hypoxic conditions, followed by centrifugation and filtration, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be intradermally or subcutaneously injected in terms of protein abundance of the secretion per site.

[Claim 3]

Use of a composition in the manufacture of a medicament for improvement of hair quality, comprising a secretion from adipose stem cells as an active ingredient, wherein the secretion is obtained by culturing the adipose stem cell in a serum-free medium under hypoxic conditions, followed by centrifugation and filtration, and wherein 10 to 30 μL of the composition comprising 0.3 to 0.45 μg of the secretion is to be intradermally or subcutaneously injected in terms of protein abundance of the secretion per site.

[Claim 4]

The use according to claim 3, wherein the improvement is reduction of gray hair.

[Claim 5]

The use according to claim 3, wherein the improvement is amelioration of roughness of hair cuticles.

[Claim 6]

The use according to claim 3, wherein the improvement is amelioration of hair thickness or growth rate.

[Claim 7]

The use according to any one of claims 1 to 6, wherein the composition is to be administered at a rate of 1 site per 1 cm^2 to 4 cm^2 of a surface of scalp or skin.

[Claim 8]

The use according to any one of claims 1 to 7, wherein the composition is to be administered in a solution volume of 10 to 30 μL per site.

[Claim 9]

The use according to any one of claims 1 to 8, wherein the administration interval is from twice a month to once every 6 months.