# **GFC**CELL™ EXO SCALP

2024 Jan

GFC Life Science Co.,Ltd


GFCCELL™
EXO SCALP KIT
GFCCELL
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9700
POWDER
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Pep9
SOLUTION


GFCCELL™
EXO SCALP KIT
Pure Leuco Exo 97%
A premium treatment ampoule for strong and healthy hair and scalp.

# Skin aging, starting from the scalp!

Where do wrinkles start?
From the top of your head, which is the top part of your body due to gravity,
Skin aging begins and connects downward to create wrinkles.

When the scalp on the frontal lobe ages, the wrinkles on the forehead,
When the occipital lobe is aged, wrinkles form on the back of the neck.
So, when your scalp gets old, so does your face.
It's covered with hair, but the scalp is also skin.

Therefore, there are many types of scalp like face skin.
Dryness, oily skin, skin trouble, and sensitivity.
Each person suffers from different concerns and symptoms,
It overlooks the importance of the scalp, so it cannot find a fundamental solution.

So, we isolated the exosomes from lactobacillus found in the young and healthy scalp,
and found the fundamental answer to scalp health.

특허증
CERTIFICATE OF PATENT

특 허 Patent Number 제 10-2215237 호

출원번호 Application Number 제 10-2020-0079037 호

출원일 Filing Date 2020년 06월 29일

등록일 Registration Date 2021년 02월 05일

발명의 명칭 Title of the Invention
세포 배양액으로부터 고수율의 엑소좀을 분리하는 방법

특허권자 Patentee
(주)지에프씨생명과학(110111-*******)
경기도 화성시 동탄순환대로 823, 17층 (영천동, 동탄에이팩시티)

발명자 Inventor
등록사항란에 기재

위의 발명은 「특허법」에 따라 특허등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2021년 02월 05일

특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
김 용 래

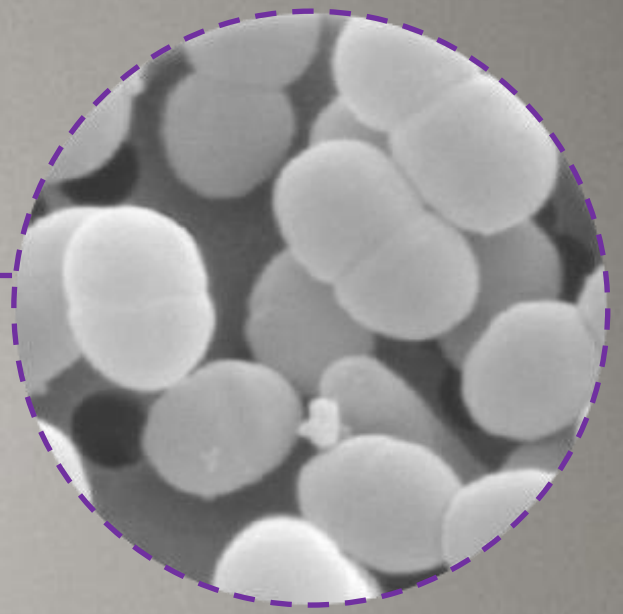
QR코드로 현재기준 등록사항을 확인하세요

특허청
Korean Intellectual Property Office

# Contains LEUCO-EXO 970,000ppm derived from Leuconostoc, scalp derived lactic acid bacteria.

97% of exosomes derived from proprietary new microorganisms (Leuconostoc GFC1203H) isolated from the scalp of 10s and 20s.

[Exosome isolation technology Patent No. 10-2215237]



Exosomes derived from lactic acid bacteria in the scalp
LEUCO-EXO

97%

Solves the root cause of the problematic scalp and restores firmness and abundant hair

# LEUCO-EXO

New proprietary lactic acid bacteria – derived exosomes separated from healthy scalp

Relieve scalp inflammation

Prevention of dry scalp

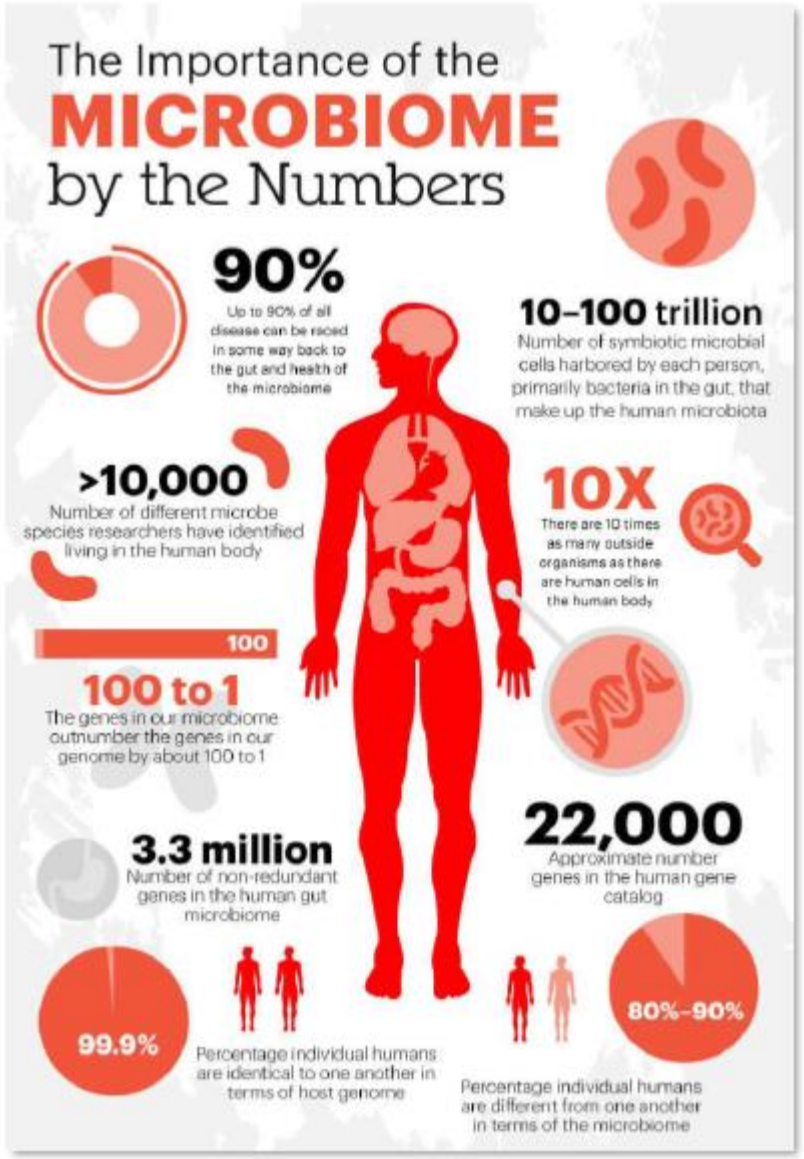
Alleviate hair loss symptoms

Healthy scalp barrier

Hair strengthening

Promote hair growth

# LEUCO-EXO | Key Ingredient – Leuconostoc GFC1203H




## Human Microbiome

◎ 10 times more than Microorganisms compare to human cells exist in our body.

◎ It is occupied 1~3% of the human weight

◎ It is part of our body, but it essential for maintaining human health.

◎ Encrypts 100 times more genetic information than the human genome

◎ The Human Microbiome Project is the second genomic project.

◎ International Human Microbiome Consortium : IHMC / Korea joined the 8th member country in 2011

◎ It identifies the correlation between human microbiome and human disease and health, and further uses the results to treat diseases and improve human health.

## Effects of Lactobacillus Fermentation on Scalp Health

◎ Recently, symbiotic microorganisms with the skin have been found to be closely related to skin immunity and maintaining skin homeostasis

◎ Possibly linked to scalp normal skin flora change and cross talk

## GFC Scalp microbe derived exosome 'Leuconostoc GFC1203H'

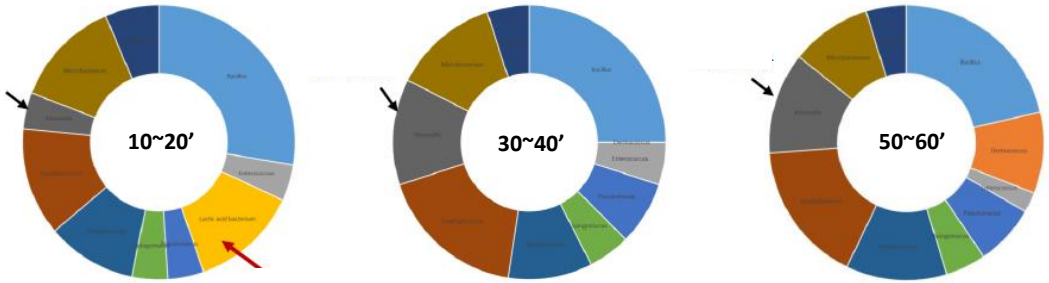
◎ Analysis of sampling of scalp-derived strains through microbial separation by age identified lactobacillus that exists specifically only in teens and 20s.

◎ Confirmation of effects such as scalp improvement through change of normal skin flora in scalp, hair growth effect through hair papillary cell proliferation effect, and suppression of scalp inflammation through anti-inflammatory activity.

# LEUCO-EXO | Key Ingredient – Leuconostoc GFC1203H

## 01 Analysis of Scalp-derived Strain Sampling by isolation of Microorganisms by Age(n=80)

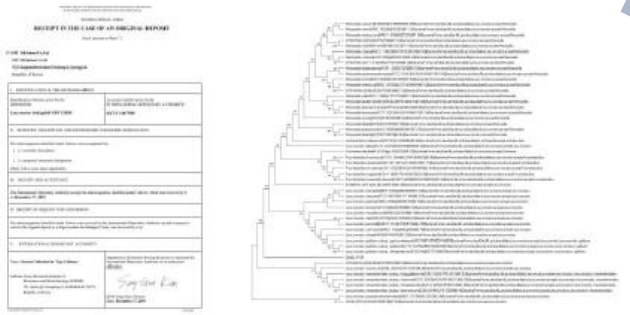
Dandruff and inflammatory bacteria




According to the study, lactobacillus was uniquely identified only in teenagers and 20s

## 02 Identification of lactic acid bacteria derived from the scalp

[Identification of new lactobacillus through DNA base analysis]



Patent deposit KCTC14077BP

New proprietary lactic acid bacteria from scalp

*'Leuconostoc* GFC1203H'

< Effect of Leuconostoc >

■ 모발의 개수 및 굵기에 대한 결과

| | Initial | 1 month | 4 months | P-value |
|---|---|---|---|---|
| Counts (Total, n=46) | 85.98±20.54 | 90.28±16.13 | 91.54 ± 16.29 | <0.001 |
| Male (n=23) | 86.91±22.21 | 88.17±17.50 | 90.78 ± 17.65 | <0.001 |
| Female (n=23) | 85.04±19.18 | 92.39±14.72 | 92.30 ± 15.17 | <0.001 |
| Thickness (mm) (Total, N=46) | 0.062±0.011 | 0.068±0.008 | 0.066 ± 0.009 | <0.001 |
| Male (n=23) | 0.058±0.009 | 0.064±0.007 | 0.063 ± 0.008 | 0.002 |
| Female (n=23) | 0.066±0.011 | 0.072±0.006 | 0.072 ± 0.010 | 0.001 |

- Reports that affect the number and thickness of hair

(World Journal of Men 's Health)

## 03

ZETAVIEW® (PARTICLE METRIX)

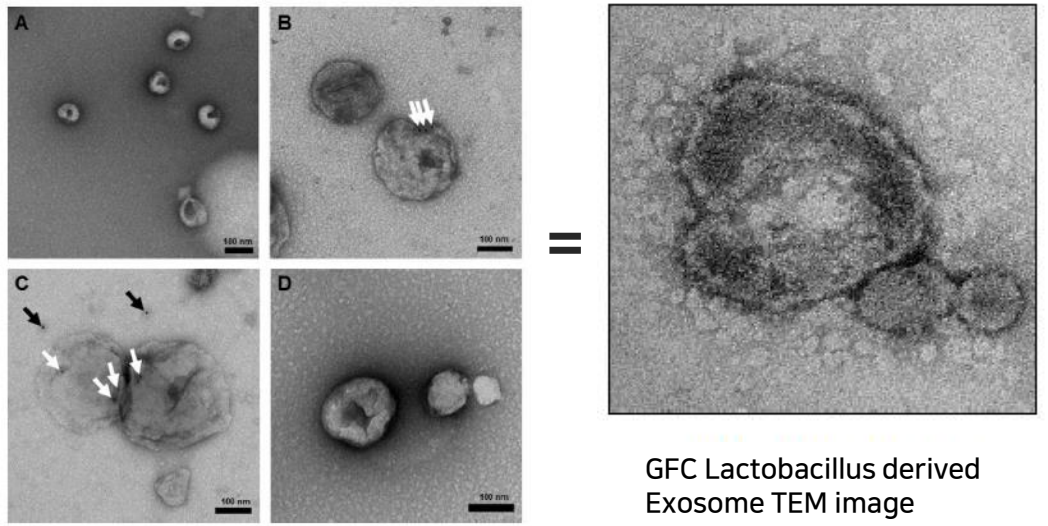
GFC Exosome Analysis Equipment


### Results of exosome analysis using TEM

Verification of the GFC's own exosomes

1. Check the round shape of exosomes
2. The black band of exosomes represents phospholipid bilayer structure

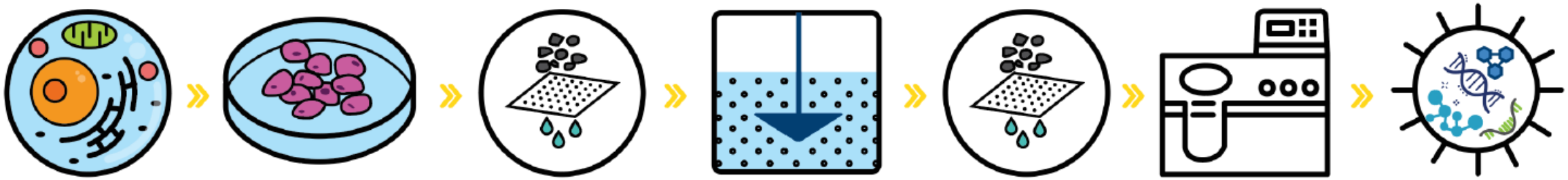
It was confirmed that it matched the previously reported image
Therefore, GFC's Leuco-Exo is a verified exosome material.




GFC Lactobacillus derived Exosome TEM image

# LEUCO-EXO | Key Ingredient – Leuconostoc GFC1203H

## Isolation / Refining technology of Exosome (patented)



Cell → Cell culture → 1st Filteration (Remove large particle & cell debris, etc.) → Salting our sediment → 2nd Filteration (Remove proteins & salts, etc.) → Separation & refining → GFCCELL™ Exosome

Left

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발명자 Inventor
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2021년 02월 05일

특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
김 용래

특허청 Korean Intellectual Property Office

Right

current issues in molecular biology

Article

Stimulatory effects of extracellular vesicles derived from Leuconostoc holzapfelii that exists in human scalp on hair growth in human follicle dermal papilla cells

Yeo Cho Yoon, Beom Hee Ahn, Jin Woo Min, Kyung Real Lee, Sang Hoon Park and Hee Cheol Kang

Abstract: Human hair follicle dermal papilla cells (HFDPCs) located in hair follicles (HFs) play a pivotal role in hair-follicle morphogenesis, hair cycling, and hair growth. Over the past decades, probiotic bacteria (PB) have been reported to have beneficial effects such as improved skin health, anti-obesity, and immuno-modulation including atopic dermatitis, and inflammatory bowel disease (IBD). PBs can secrete 50–150 nm sized extracellular vesicles (EVs) containing microbial DNA, mRNA, proteins, lipids, and cell-wall components. These EVs can regulate communication between bacteria or between bacteria and their host. Although numerous biological effects of PB-EVs have been reported, the physiological roles of Leuconostoc holzapfelii (hu-Lh), which was isolated from human scalp tissue, and the extracellular vesicles derived from them (hu-LhEVs) are largely unknown. Herein, we investigated the effects of hu-LhEVs on hair growth in HFDPCs. We show that hu-LhEVs increase cell proliferation, migration, and regulate cell cycle. Furthermore, hu-LhEVs modulated the mRNA expression of hair growth related genes in vitro. These data demonstrate that hu-LhEVs can reduce apoptosis by modulating the cell cycle as well as promote hair growth by regulation via the Wnt/β-catenin signal transduction pathway.

Keywords: Extracellular vesicles (EVs); Probiotic bacteria; Human scalp-derived Leuconostoc holzapfelii (hu-Lh); Apoptosis; Hair growth

1. Introduction

Human hair not only affects external appearance and protects the head, but also maintains head temperature [1]. Hair loss, known as alopecia, is a common medical disorder that affects all genders. Hair loss can occur as a result of several abnormal changes such as seasons, fatigue, stress, hormone imbalances, drugs, pollution, and aging [2]. In a modern society that values outward appearance, hair loss can cause mental stress, lower quality of life, and become an obstacle to human relationships or social life [3,4]. Hair follicles (HFs), one of the adnexal components of mammalian skin, are derived from interactions between epithelial and mesenchymal compartments during embryonic development [5,6] and are the sites of hair growth, which is regulated by growth factors [7]. Hair growth occurs in four phases: anagen (a rapid hair proliferation period), catagen



hu-LhEVs (Cryo-TEM)

(D)

Figure 2. Purification and characteristics of probiotic bacteria derived extracellular vesicles (PB-EVs). (A) Representative frame from one of the PB-EV nanoparticle tracking analysis videos is shown. The purified EVs were diluted 1:1000 in DPBS. (B) Particle size and number of PB-EVs determined by nanoparticle tracking analysis (NTA). (C) Protein and particle concentration of PB-EVs. (D) Cryo-TEM image analysis with negative staining of Leuconostoc holzapfelii derived extracellular vesicles (hu-LhEVs). The outlined EVs images are enlarged and the lipid bilayer indicated by black and white arrows. Black and white arrowheads indicate the potential double membrane of the vesicles. Scale bars, 200 nm. BiEVs; Bifidobacterium longum derived extracellular vesicles, BaEVs; Bifidobacterium animalis derived extracellular vesicles, LcEVs; Lactobacillus acidophilus derived extracellular vesicles, hu-LhEVs; Leuconostoc holzapfelii isolated from human scalp derived extracellular vesicles, LpEVs; Lactobacillus plantarum derived extracellular vesicles. All data are indicated as mean ± SD of three independent experiments.

*Probiotic bacteria-EVs induce HFDP cell migration and proliferations*

To understand whether EVs isolated from PB belonging to lactobacillus and bifidobacterium could influence HFDP cell migration, a scratch wound healing assay was performed in the presence of 10 μg/mL PB-EVs. We found that cell migration was generally increased by 24 h treatment with all PB-EVs. However, the patterns of cell migration by treatment with hu-LhEVs significantly increased when compared to other PB-EVs (Figure 3A, B). As it was revealed that cell migration was enhanced by hu-LhEVs compared with other PB-EVs, we further examined the effects of hu-LhEVs on HFDP cells in dose and time dependent manners. Depending on the treatment concentration and incubation time, the presence of hu-LhEVs was associated with more rapid healing of the initial wound area than the PBS control. These results demonstrate that HFDP cell exposure to hu-LhEVs accelerates cell migration (Figure 4A, B). We also validated that PB-EVs exert a proliferative effect on HFDP cells. We treated the cells with 10 μg/mL of PB-EVs and measured proliferation with the CCK-8 assay at 24 h. HFDP cell proliferation increased by about 7 to 11% in all groups treated with PB-EVs except for hu-LhEVs where cell proliferation significantly increased by 24% (Figure 3C). Further experiments on the effect of hu-LhEVs treatment on cell proliferation revealed a dose-dependent effect. Taken together, these results suggest that not only does PB-EV treatment induce cell migration and increase cell proliferation in HFDP cells, but also that LhEVs have a greater effect than other PB-EVs used in this study.

**Left**

**[Patent No. 10-2215237]**
To isolate high ratio of Exosome from cell conditioned media

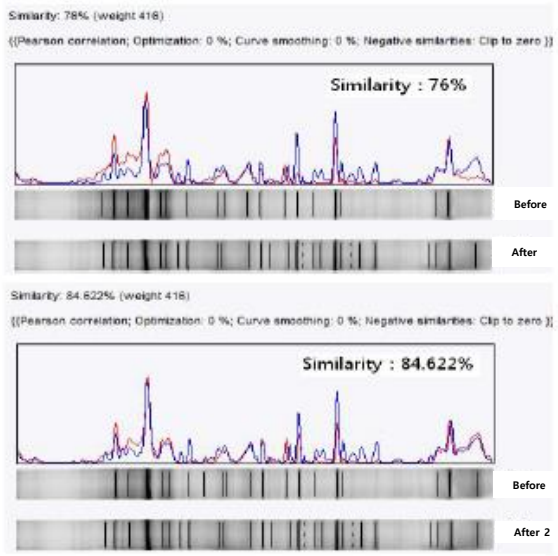
**Right**

**[LEUCO-EXO related thesis]**
Stimulatory effects of extracellular vesicles derived from Leuconostoc holzapfelii that exists in human scalp on hair growth in human follicle dermal papilla cells

# LEUCO-EXO | Key Ingredient – Leuconostoc GFC1203H

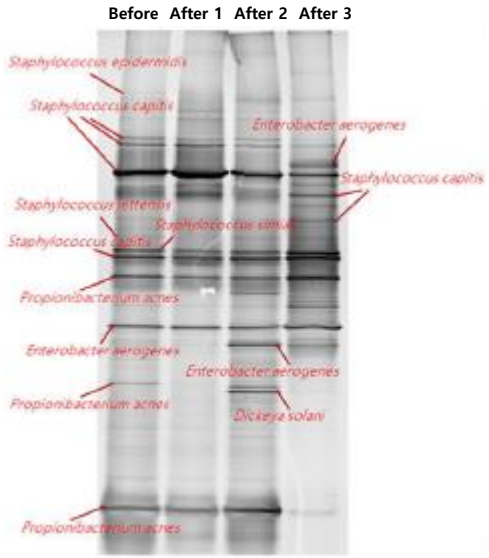
## When treating scalp-derived lactic acid bacteria

### Diversity of strains



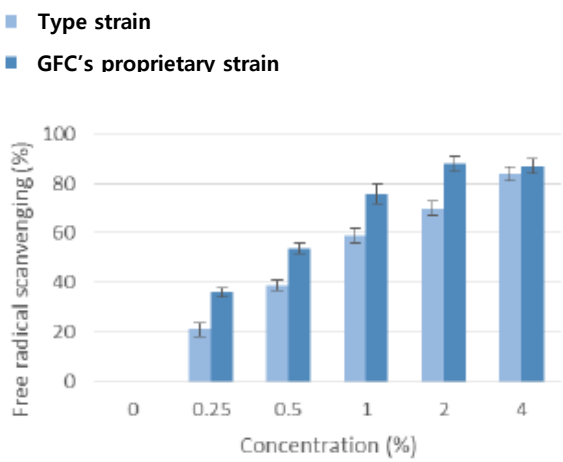

Confirm the diversity of strains when treat GFC's proprietary strain

### Inhibition of harmful bacteria



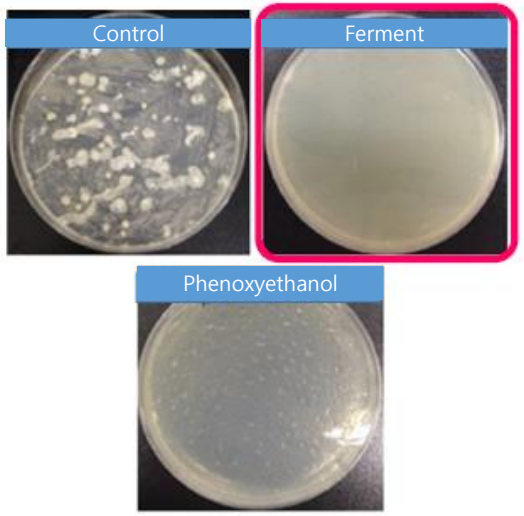

Confirm the diversity of strains and inhibition of P. Acne which is scalp inflammatory strain when treat GFC's proprietary strain

### Anti-oxidant effect




The anti-oxidant effect of GFC's proprietary strain is more excellent compared to type strain

### Dandruff inhibitory effect



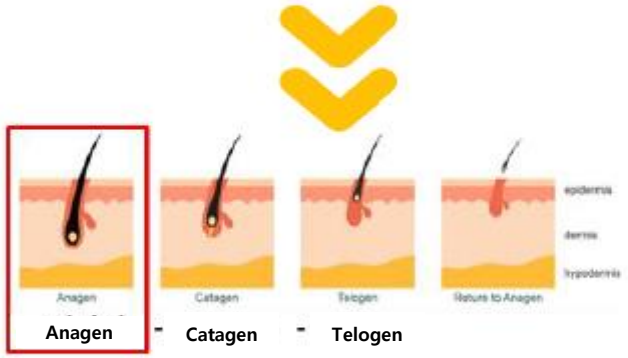

Confirmation of **Malassezia furfur's** inhibitory effect known as the causative agent of dandruff and scalp inflammation

## When treating scalp-derived lactic acid bacteria

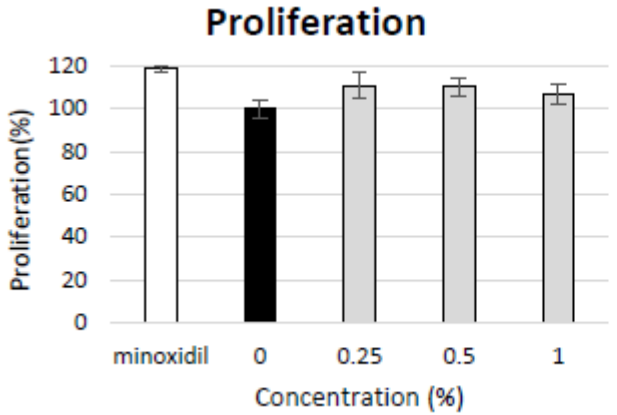
**Efficacy of** hair papilla cell proliferation

### Hair papilla cell activation

Hair papilla cell : Cell located at the end of hair roots, "seeds of hair" that raise nutrients to hair

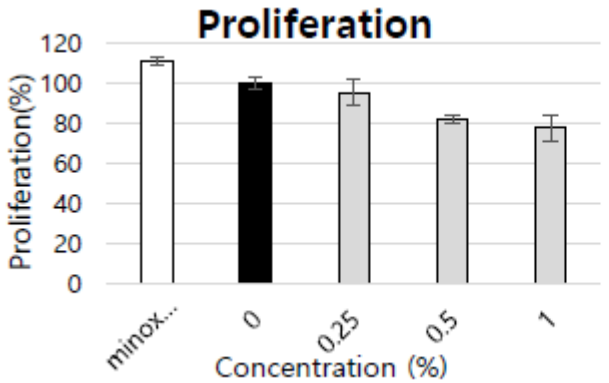



**"Increase in the number of hair in growth period"**




◎ **Increase more than 110% of hair papilla cell when treat 0.25% of GFC's proprietary isolated strain conditioned media**

(Increase 118% when treat 10uM of positive control group minoxidil)




◎ **No increase effect when treat type strain conditioned media**

(Increase 118% when treat 10uM of positive control group minoxidil)

## When treating scalp-derived lactic acid bacteria

### Efficacy of hair growth

### Hair-related indicator

* KGF(FGF) : Keratinocyte growth factor

- hair cycle factor group

→ Hair cycle controller that stimulate hair growth & induce growth

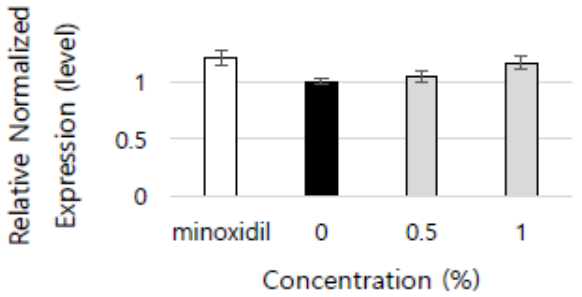
* GHR : Growth hormone receptor

- growth factor group

→ Combining with growth hormone to induce hair growth

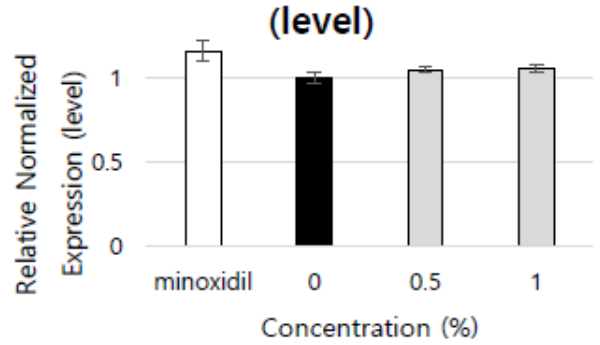
**"Induce hair production"**
**by controlling hair-related genes**

**KGF mRNA expression (level)**




◎ It is the maximum expression at 1% concentration of GFC's proprietary isolated strain conditioned media, and KGF level increases about 1.2 times

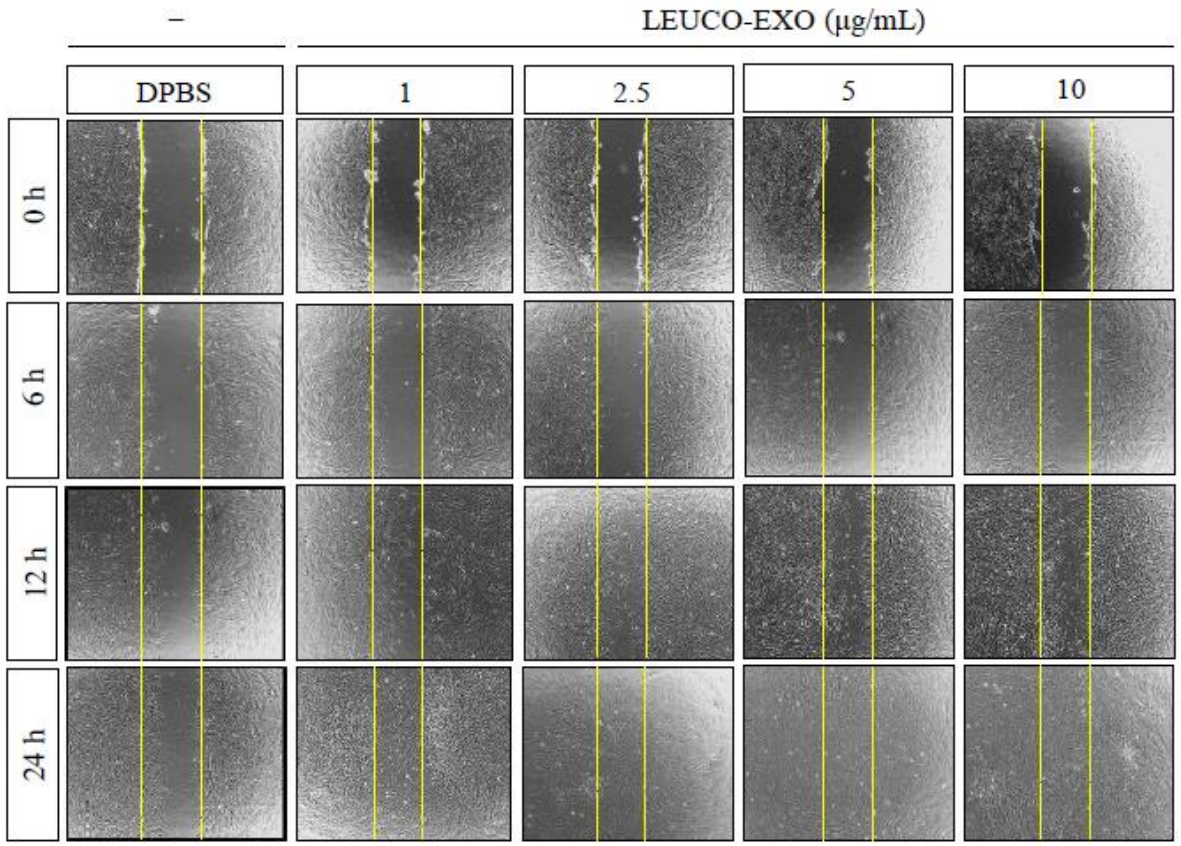
**GHR mRNA expression (level)**

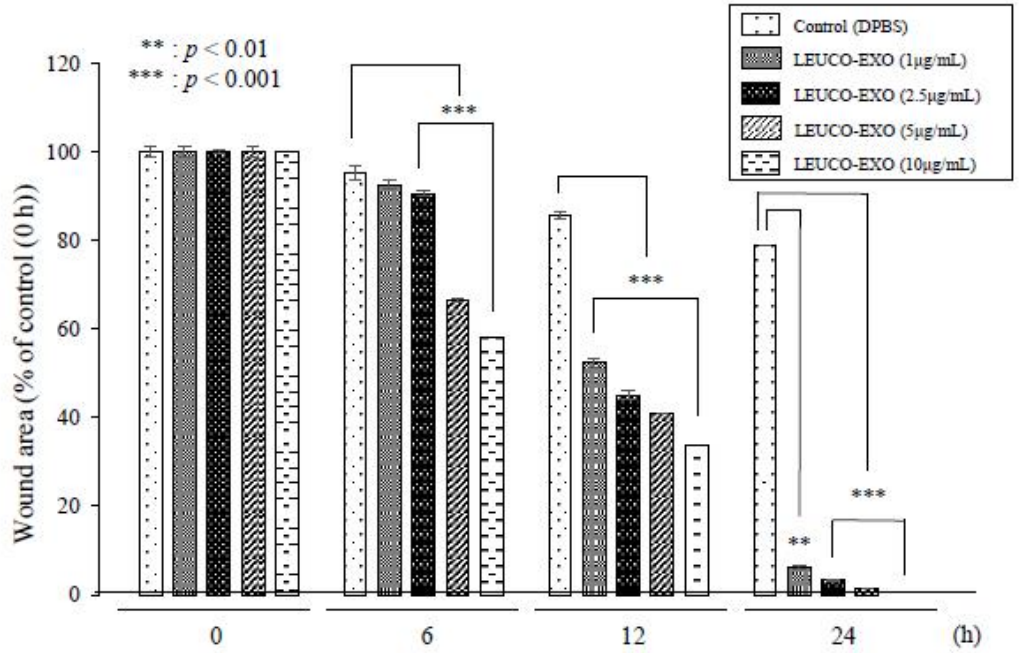



◎ It is the maximum expression at 1% concentration of GFC's proprietary isolated strain conditioned media, and GHR level increases about 1.2 times

## Efficacy of LEUCO-EXO isolated from scalp-derived lactic acid bacteria

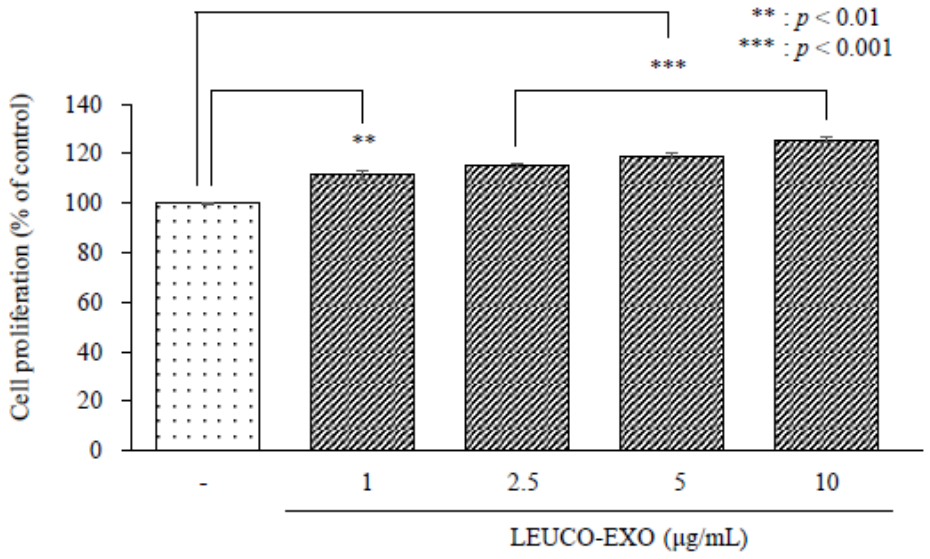
**Wound healing effect by promoting ability to migrate** hair papilla cell



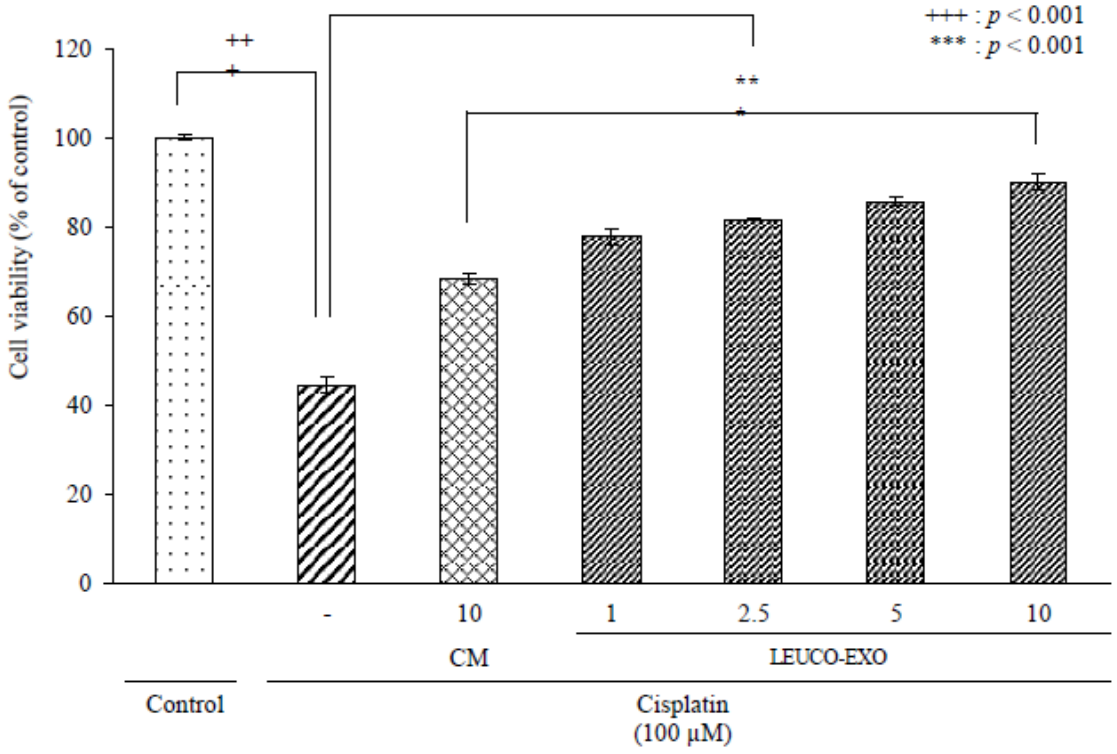



# Efficacy of LEUCO-EXO isolated from scalp-derived lactic acid bacteria

## Efficacy of Promoting hair papilla cell proliferation



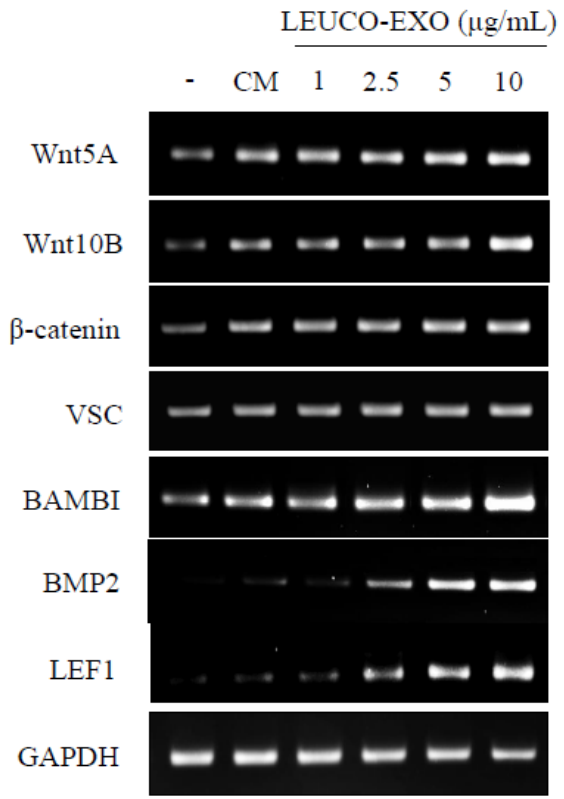

## Efficacy of cell viability

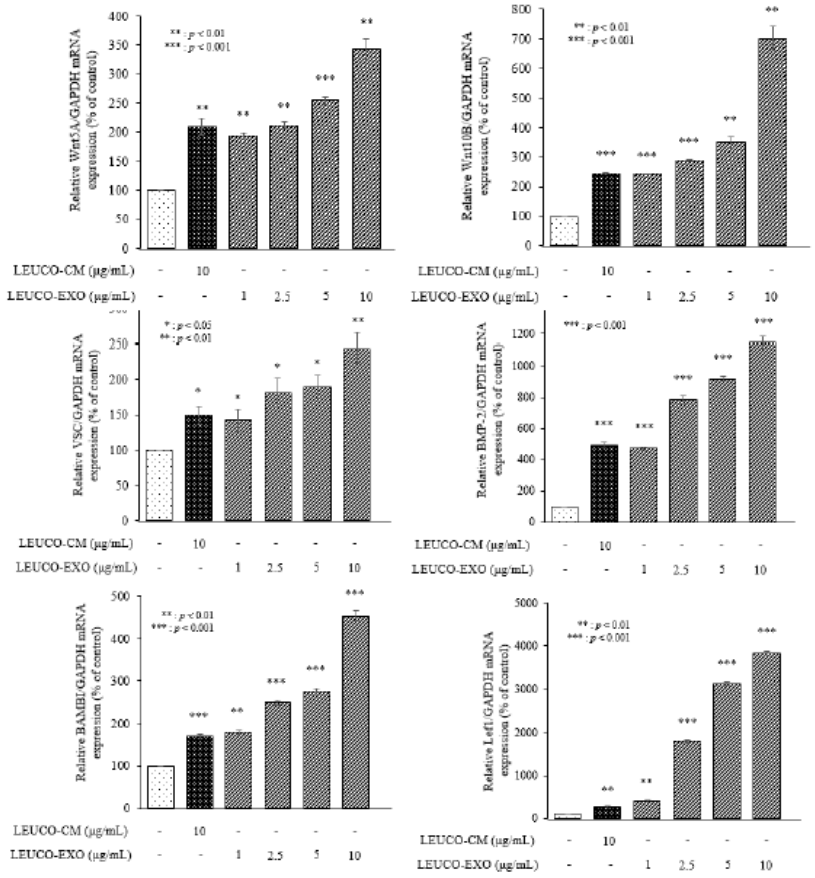



* Cisplatin : Anti-cancer drugs, cytotoxicity-inducing substance

# Efficacy of LEUCO-EXO isolated from scalp-derived lactic acid bacteria

## Efficacy of control hair growth gene mechanism

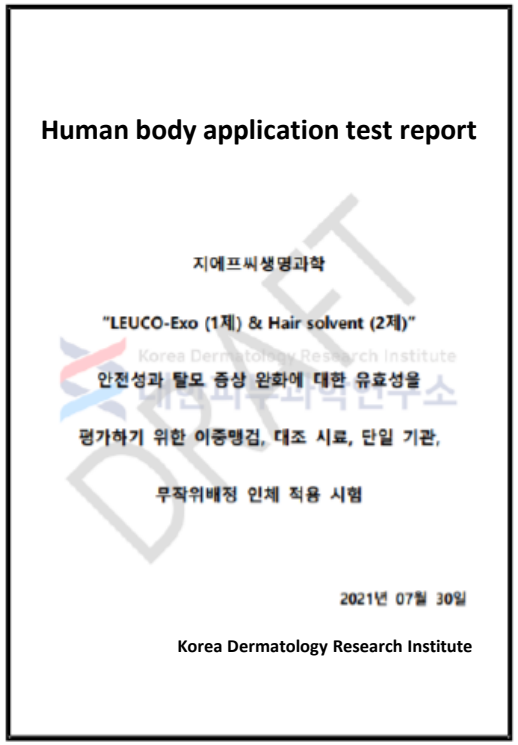


# LEUCO-EXO | Key Ingredient – Leuconostoc GFC1203H

## Confirmation of functionality to relieve hair loss symptoms through human body application test

**Double-blind, placebo-controlled, single-site, randomized, human application test to evaluate safety and effectiveness of alopecia prevention of "Leuco-Exo (1st agent) & Hair solvent (2nd agent)"**



**Human body application test report**

지에프씨생명과학

"LEUCO-Exo (1제) & Hair solvent (2제)"

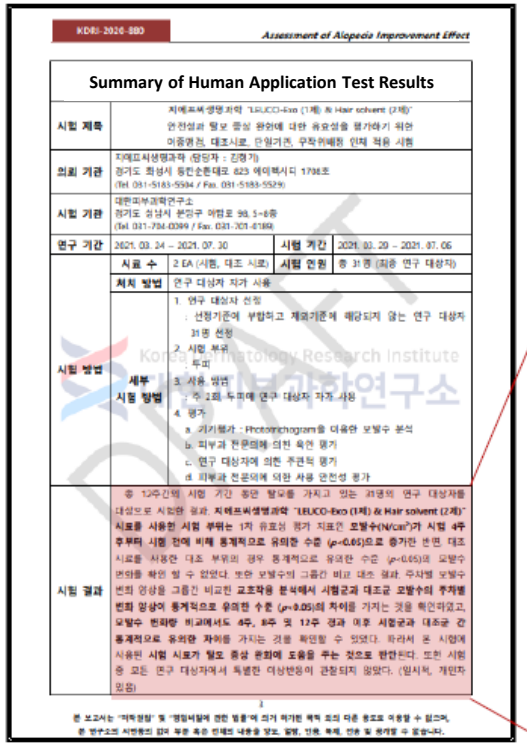
안전성과 탈모 증상 완화에 대한 유효성을

평가하기 위한 이중맹검, 대조 시료, 단일 기관,

무작위배정 인체 적용 시험

2021년 07월 30일

Korea Dermatology Research Institute



KDRI-2020-BBO *Assessment of Alopecia Improvement Effect*

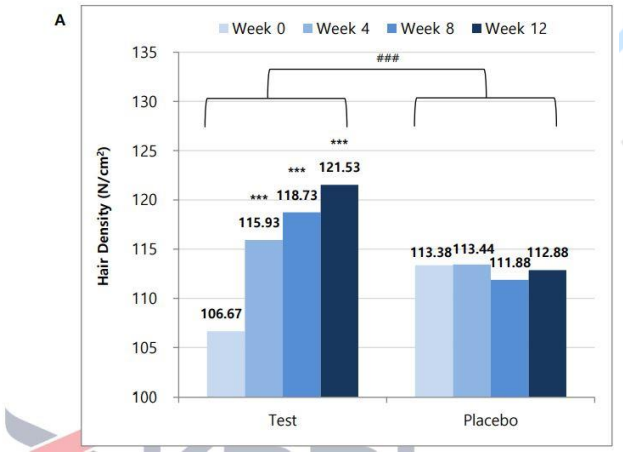
**Summary of Human Application Test Results**

| | |
|---|---|
| 시험 제목 | 지에프씨생명과학 "LEUCO-Exo (1제) & Hair solvent (2제)" 안전성과 탈모 증상 완화에 대한 유효성을 평가하기 위한 이중맹검, 대조시료, 단일기관, 무작위배정 인체 적용 시험 |
| 의뢰 기관 | 지에프씨생명과학 (담당자 : 김형기)<br>경기도 화성시 동탄순환대로 823 에이백시티 1708호<br>(Tel. 031-5183-5594 / Fax. 031-5183-5529) |
| 시험 기관 | 대한피부과학연구소<br>경기도 성남시 분당구 에탑로 98, 5~6층<br>(Tel. 031-704-0399 / Fax. 031-701-6186) |
| 연구 기간 | 2021. 03. 24 – 2021. 07. 30 / 시험 기간 2021. 03. 29 – 2021. 07. 06 |
| 시험 방법 | 시료 수: 2 EA (시험, 대조 시료) / 시험 참원: 총 31명 (최종 연구 대상자)<br>처치 방법: 연구 대상자 자가 사용<br>세부 시험 방법: 1. 연구 대상자 선정 : 선정기준에 부합하고 제외기준에 해당되지 않는 연구 대상자 31명 선정<br>2. 시험 부위 : 두피<br>3. 사용 방법 : 주 2회 두피에 연구 대상자 자가 사용<br>4. 평가<br>a. 기기평가 : Photonichogram을 이용한 모발수 분석<br>b. 피부과 전문의에 의한 육안 평가<br>c. 연구 대상자에 의한 주관적 평가<br>d. 피부과 전문의에 의한 사용 안전성 평가 |
| 시험 결과 | 총 12주간의 시험 기간 동안 탈모를 가지고 있는 21명의 연구 대상자를 대상으로 시험한 결과, 지에프씨생명과학 "LEUCO-Exo (1제) & Hair solvent (2제)" 시료를 사용한 시험 부위는 1차 유효성 평가 지표인 모발수(N/cm²)가 시험 4주 후부터 시험 전에 비해 통계적으로 유의한 수준 ($p<0.05$)으로 증가한 반면 대조 시료를 사용한 대조 부위의 경우 통계적으로 유의한 수준 ($p<0.05$)의 모발수 변화를 확인 할 수 없었다. 또한 모발수의 그룹간 비교 대조 결과 주사별 모발수 변화 양상을 그룹간 비교한 교호작용 분석에서 시험군과 대조군 모발수의 주차별 변화 양상이 통계적으로 유의한 수준 ($p<0.05$)의 차이를 가지는 것을 확인하였고, 모발수 변화량 비교에서도 4주, 8주 및 12주 경과 이후 시험군과 대조군 간 통계적으로 유의한 차이를 가지는 것을 확인할 수 있었다. 따라서 본 시험에 사용된 시험 시료가 탈모 증상 완화에 도움을 주는 것으로 판단된다. 또한 시험 중 모든 연구 대상자에서 특별한 이상반응이 관찰되지 않았다. (일시적, 개인차 있음) |



본 보고서는 '의학정보' 및 '생명비밀에 관한 법률'에 의거 허가된 목적 외의 다른 용도로 이용할 수 없으며, 본 연구소의 서면허가 없이 무단 복은 인쇄된 내용을 양도, 도용, 인용, 복제, 인출 및 판매할 수 없습니다.

A. Primary efficacy endpoint - Hair density (N/cm²)



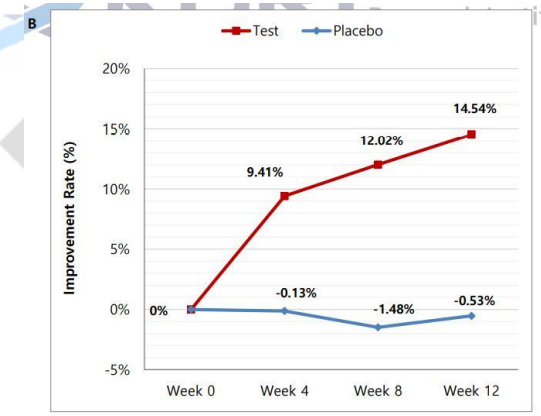




Fig 2. Change of Hair Density (N/cm²) (A: Hair Density, B: Improvement Rate)

**As a result of testing 31 research subjects suffering from hair loss during the 12-week test period, the areas where GFC Life Science Co.,Ltd. "Leuco-Exo (1st agent) & Hair solvent (2nd agent)" were applied showed a statistically significant increase ($p<0.05$) in the number of hairs (N/cm2), the main efficacy index, from Week 4 compared to before the test. On the other hand, the areas where the placebo sample had been applied showed no statistically significant changes ($p<0.05$) in the number of hairs. In addition, the comparison and interaction analysis of the weekly changes in the number of hairs between the groups revealed statistically significant differences ($p<0.05$). There were also statistically significant differences in changes in the number of hairs after Weeks 4, 8 and 12. Therefore, "Leuco-Exo (1st agent) & Hair solvent (2nd agent)" is judged to have alopecia prevention efficacy. In addition, no specific adverse reactions were observed in any of the study subjects during the test. (There may be temporary changes and individual differences.)**

B. Secondary efficacy endpoint - Visual evaluation score by researchers

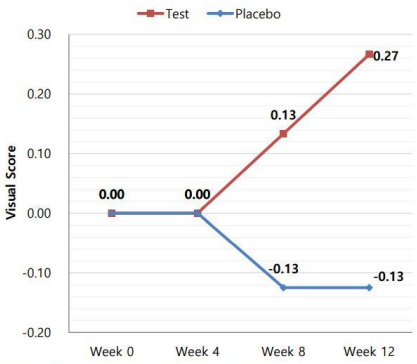



Fig 4. Change of Visual evaluation score by researchers


GFCCELL™
EXO SCALP KIT
GFCCELL
EXO SCALP
9700
POWDER
GFCCELL
EXO SCALP
Pep9
SOLUTION


GFCCELL™
EXO SCALP KIT
Pure Leuco Exo 97%
A premium treatment ampoule for strong and healthy hair and scalp.

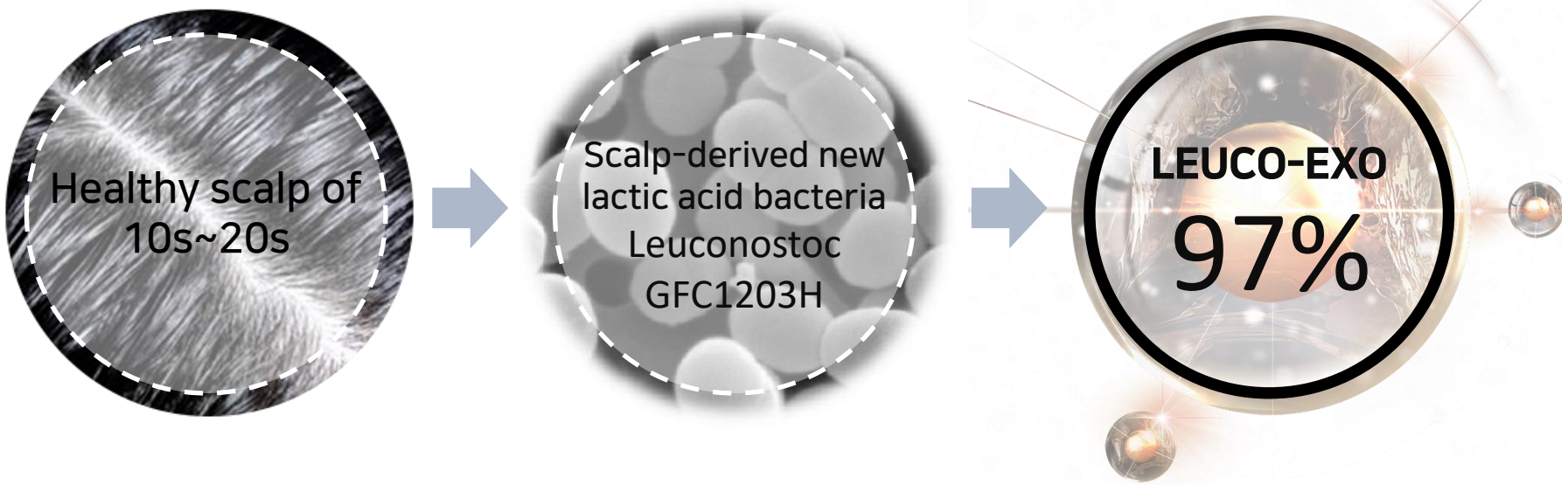
# GFCCELL™ EXO SCALP 9700 POWDER

"Freeze dried solution containing high-concentration/purity of LEUCO-EXO 97%"

## GFCCELL™ EXO SCALP 9700 POWDER

[1st agent | Freeze dried Exosome powder]


180mg x 5vials




- LEUCO-EXO : Exosome derived from new proprietary lactic acid bacteria isolated from healthy scalp of 10s~20s(Leuconostoc GFC1203H)
- Improve to healthy scalp through cluster change of scalp resident flora
- Hair growth effect through hair papilla cell proliferation and suppression of scalp inflammation through activation of anti-inflammation

[Ingredients] Leuconostoc/Radish Root Ferment(97%), Mannitol

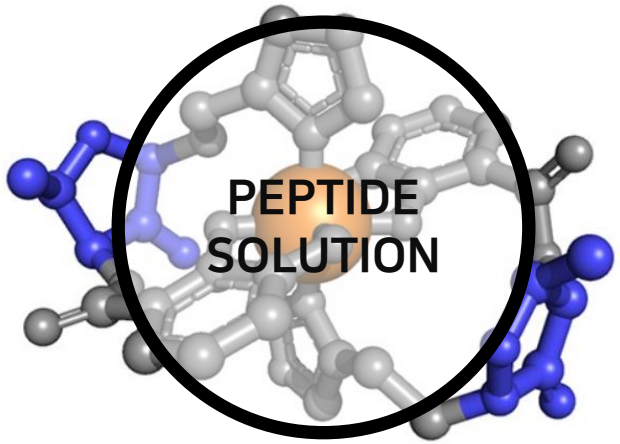
# GFCCELL™ EXO SCALP Pep9 SOLUTION

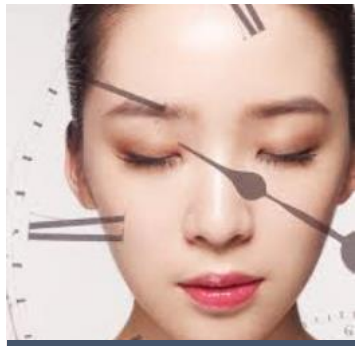
"Peptide activating solution that Exosome powder and active ingredients combine to maximize absorption and efficacy"

## GFCCELL™ EXO SCALP Pep9 SOLUTION

[2ND agent | Liquid solution]


4ml x 5vials



**Anti-Wrinkle**

+ Acetyl Hexapeptide-8
+ Palmitoyl Tetrapeptide-7
+ Palmitoyl Tripeptide-1
+ Palmitoyl Pentapeptide-4

**Anti-Hair loss**

+ Nonapeptide-1
+ Alanine/Histidine/Lysine Polypeptide Copper HCL

**Skin-regenerating**

+ Copper Tripeptide-1
+ Hexapeptide-9
+ Tripeptide-1

- Combination of 9 kinds of Peptides for anti-aging, anti-wrinkle, anti-hair loss and hair papilla cell proliferation
- Care of rich hair and healthy scalp with synergy of Exosome and Peptides to the scalp
- Anti-oxidant effect UP by containing various skin active ingredients such as sodium hyaluronate, caffeine and panthenol

[Ingredients] Water, Butylene Glycol, Glycerin, Copper Tripeptide-1, Tripepride-1, Acetyl Hexapeptide-8, Hexapeptide-9, Palmitoyl Pentapeptide-4, Palmitoyl Tetrapeptide-7, Palmitoyl Tripeptide-1, Nonapeptide-1, Alanine/Histidine/Lysine Polypeptide Copper HCL, Sodium Hyaluronate, Caffein, Panthenol, Tranexamic Acid, Glutathione, Glucose, Sodium PCA, Sodium lactate, Arginine, Aspartic Acid, PCA, Glycine, Alanine, Serine, Valine, Proline, Threonine, Isoleucine, Histidine, Phenylalanine, Pentylene glycol, Polyglyceryl-10 laurate, Caprylyl Glycol, 1,2-Hexanediol

Premium anti-aging scalp booster starting from tip of head

Friendly and efficiently improving problematic scalp

# GFCCELL™ EXO SCALP KIT

The solution to maximize synergy of LEUCO-EXO

### Enhance Barrier

Enhance the barrier in the scalp to recover from healthy scalp

### Alleviate inflammation

Normalization of problematic scalp through cluster change of scalp resident flora

### Promotion of hair growth

Prevention of hair loss and promotion of hair growth bring the abundant hair

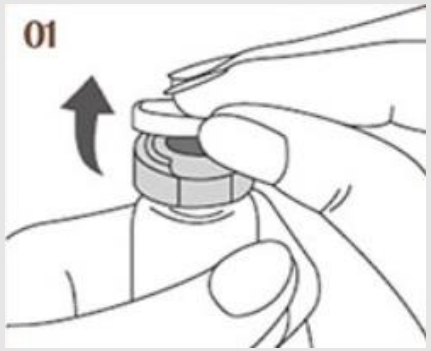
Freeze dried Exosome powder[1st agent] containing high content and high efficacy of effective ingredients of LEUCO-EXO from new proprietary lactic acid bacteria derived from 10s~20s healthy scalps.

+

Activating solution[2nd agent] that born from golden ratio's combination of various skin active ingredients and 9 kinds of Peptides

▼

# Maximize scalp booster function


① Remove the transparent cap of the 1st agent powder container by lifting it in the direction of the arrow.


② Grasp the aluminum cap handle and pull it down, then turn it to the side and open.


③ Remove the cap and rubber of 2nd agent solution same as 1st agent then mix with 1st agent powder.


# **GFC**CELL™ EXO SCALP KIT

Capacity and configuration : **(180mg + 4ml) * 5 sets** = 1box

[1st agent] 180mg + [2nd agent] 4ml = 1set (a dose of medicine)
total 5 doses configuration

Exosome content : **970,000 ppm**

## How to use

- Mix the 2nd agent liquid solution in the 1st freeze dried powder
- After completely dissolving the 1st agent freeze dried powder, leave it still for up to 3~5 minutes to remove air bubbles before using it
- Use mixture dissolved freeze dried powder within a maximum of 3 hours to ensure the stability of product

## Subject of advice

- **GFC**CELL™ EXO SCALP is recommended to be used at least 3 times, on average 5 times
- **GFC**CELL™ EXO SCALP 1 set mixture with 1st and 2nd agent is used once per person
- To maintain the efficacy of content, it is recommended to store it in refrigerator condition below 5℃

## Recommend for this type of scalp!

- Dry and itchy scalp
- Scalp that easily becomes oily hair or easily occurs pimples and dandruff
- Scalp that hair becomes thin and increase number of drop
- Scalp that feels heat and becomes sensitive
- Scalp that is beginning to show signs of aging such as noticeable gray hair

## No recommend for this type of scalp!

- Healthy, clear, milky scalp
- Scalp with full and glossy hair
- For those who expect temporary improvement of troubled scalp


# VITAL & SCALP PROTOCOL

# **Protocol** | Hair Care Programs

| Type | Method | Period | 1W | 2W | 3W | 4W | 5W | 6W | 7W | 8W |
|---|---|---|---|---|---|---|---|---|---|---|
| Scalp & hair loss care | MTS+Exo Scalp (1mm) | 8 weeks | MTS<br>9700 POWDER<br>Pep9 SOLUTION | MTS<br>9700 POWDER<br>Pep9 SOLUTION | MTS<br>9700 POWDER<br>Pep9 SOLUTION | MTS<br>9700 POWDER<br>Pep9 SOLUTION | MTS<br>9700 POWDER<br>Pep9 SOLUTION | MTS<br>9700 POWDER<br>Pep9 SOLUTION | MTS<br>9700 POWDER<br>Pep9 SOLUTION | MTS<br>9700 POWDER<br>Pep9 SOLUTION |

# Scalp Care Program | Scalp, Anti-hair loss care

## Step 1
Scalp cleansing

① Scalp cleansing

## Step 2
Personalized care

① Magnetic therapy
② Steamer
③ Scaling
④ Therapeutic ultrasound
⑤ Cleansing

## Step 3
Personalized care

① Mesotherapy
② Ion therapy

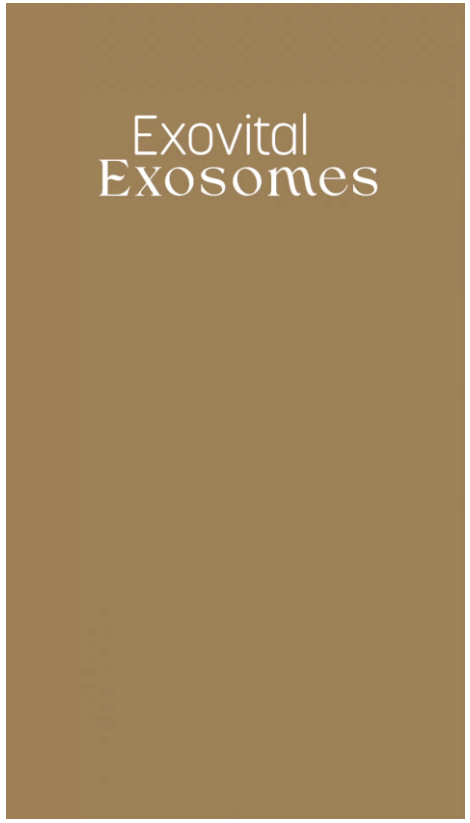
## Step 4
MTS + ExoScalp

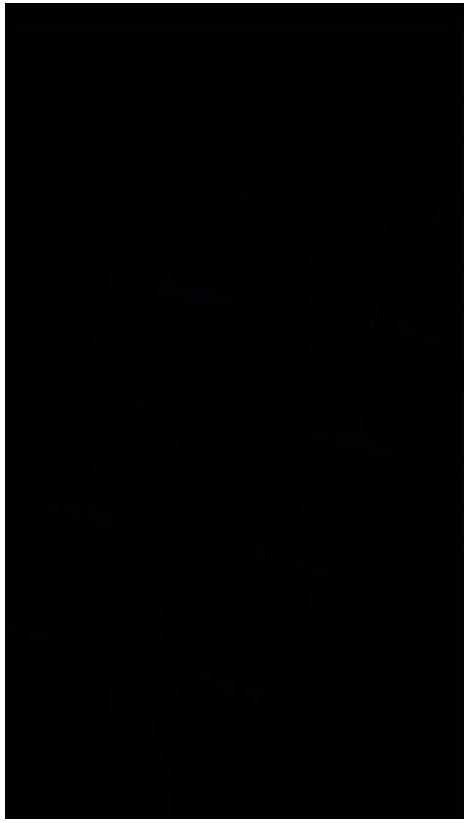

① Mix with Exo Scalp 1st agent powder and 2nd agent liquid solution
② Apply the mixture to the treatment area
③ Repeat MTS treatment

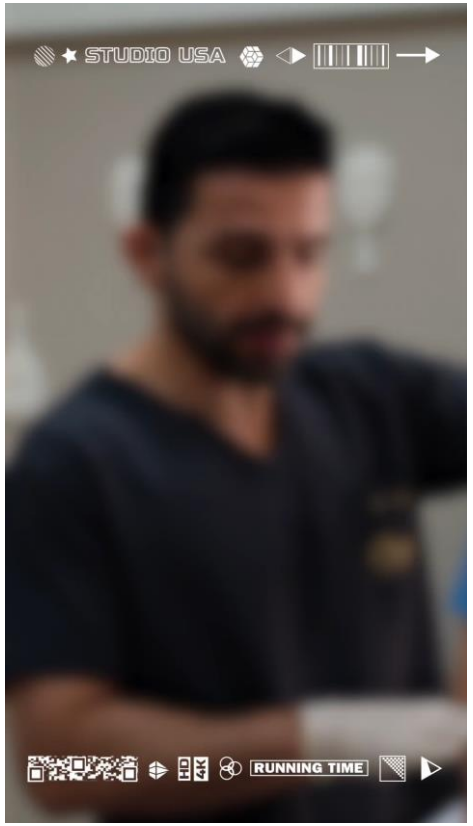
## Step 5
Personalized care

① Personalized care

# **Skin Program** | Short Video clip for Hair Session





# Before & After Result

Before

After

Male, USE GFCCELL™ EXO SCALP for hair line for 12 weeks

Before

After

Male, USE GFCCELL™ EXO SCALP for the top of the head for 12 weeks

# Before & After Result

Before

After

Female, after 3 sessions every 2 week (GFCCELL™ with Injections)

Before

After

Male, USE GFCCELL™ EXO SCALP for the front of scalp for 12 weeks

# Before & After Result

Before

After

Male, USE GFCCELL™ EXO SCALP for the top of the head for 12 weeks

Before

After

Male, USE GFCCELL™ EXO SCALP for the front of scalp for 12 weeks

# Before & After Result

Before

After

Male, USE GFCCELL™ EXO SCALP for the front of scalp for 12 weeks

Before


After


Male, USE GFCCELL™ EXO SCALP for the front of scalp for 12 weeks

# Before & After Result

Before

After

Male, after 3 sessions every 2 week (GFCCELL™ with Injections)

Before

After

Male, after 3 sessions every 2 week (GFCCELL™ with Injections)

# Before & After Result

Before

After

Before

After

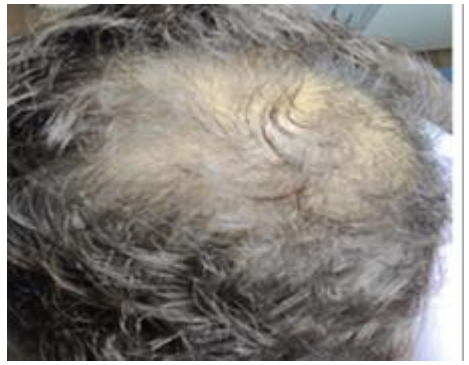
Female, after 3 sessions every 2 week (GFCCELL™ with Injections)

# Before & After Result

**Before session**

**A week after session**

**2 weeks after session**



**3 weeks after session**

**5 weeks after session**

**8 weeks after session**

Male, USE GFCCELL™ EXO SCALP (GFCCELL™ with MTS for 8 weeks)

# Before & After Result



Male, USE GFCCELL™ EXO SCALP (GFCCELL™ with MTS for 8 weeks)