

No.1 Postbiotics bereum

BEREUM

 Korea No.1 Postbiotics

Specializing in Postbiotics field for over 30 years.

World's highest rate of concentrated heat-killed probiotics per gram (7.5 trillion / g)

Trusted by over 250 companies, (Foods & Supplements)
over 200 brands in Korea uses bereum postbiotics.

Key Features

- Regulates gut & immunity
- Trillion cell concentration
- Heat / Acid resistancy
- HALAL, FSSC22000, HACCP, FDA Registration
- Vegan Postbiotics, Human Microbiome Postbiotics

Strains

- EF-2001
(Enterococcus faecalis)
- Lb. casei
- Lb. plantarum
- Lb. acidophilus
- Lb. Paracasei



Our postbiotics cultivation process



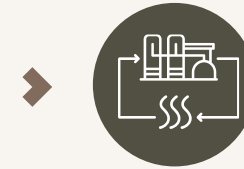
Flask cultivaton



100L tank cultivation



Main tank cultivation



Heat Treatment Process



Powderization(Spray Dryer)



HANARIN®

POSTBIOTICS ANTI HAIR LOSS SHAMPOO

For your confident daily life

Bereum HanaRin Postbiotics Anti Hair loss shampoo



No.1 Postbiotics bereum

The Brand, 'HANARIN'

Hanarin means 'to be pure from the sky' in Korean.

Like the meaning of Hanarin, It is a premium line of cosmetic brand that combines the desire of bereum to create pure and good products with Postbiotics Microbiome Technology.



No.1 Postbiotics bereumc

HANARIN-Postbiotics Anti-Hair loss shampoo

Take Care of your precious hair with Clinically Proven Microbiome formula

Experience the Gentle Yet Powerful Results

Unique charm of the Hanarin Anti-Hair loss shampoo

No.1 Postbiotic

Grow your Healthy Microbiome with 1 trillion Cell of Patented EF-2001 Postbiotics

Clinically verified

Anti-Hair Loss, hair density and Scalp condition Improvement

Refreshing

Noticeable cleansing effect even with just one time use

Eco-friendly

Healthy fruit extract, natural 10-black food

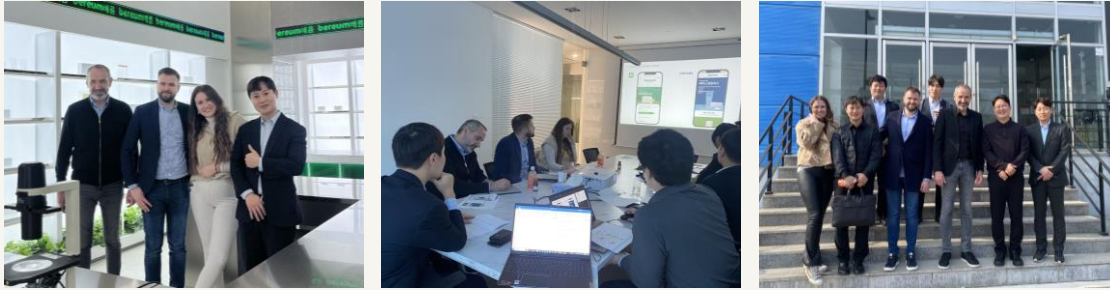
No Irritant

Nature-based Formula, not reported any abnormal skin response



No.1 Postbiotics bereum

Amazing Experience based on True Story!



BOM Group is a conglomerate operating group in five European countries, engaged in the manufacturing and distribution of health functional foods, coffee, salt, and real estate business. Our European partner Mitar who is one of the board member of Bom group was half-bald and had been taking Minoxidil for Hair loss prevention and regrowth. He was only interested in Postbiotics Supplement before he felt the real effect of Hanarin Anti-Hair Loss Shampoo.



He decided to try the formula instead of taking Minoxidil with our recommendation. He stopped applying Minoxidil almost for 2 month, lost lot's of hair bu never gave up. 2 month later, He finally started to use Hanarin Anti Hair loss shampoo for 2month. The result was really amazing, He figured out he brought back lot's of hair again. He got to have no need for Minoxidil anymore, feeling More comfortable with daily use of shampoo, Not medicine.



With the fantastic experience, our partner decided to add Cosmetic Line to their plan. Vitamed and bereum has signed a comprehensive supply agreement with not only for supplements but also for a range of five cosmetic products, as part of their aggressive marketing strategy to penetrate the European market. Partner's remarkable experience with the products seems to have had a definite impact. The Postbiotics Cosmetics and Supplement brand will be launched Around this second half of 2023 in more than 5 countries in EU including Germany and Austria, Mainly in Pharmacy channel.

No.1 Postbiotics bereum

Point 01

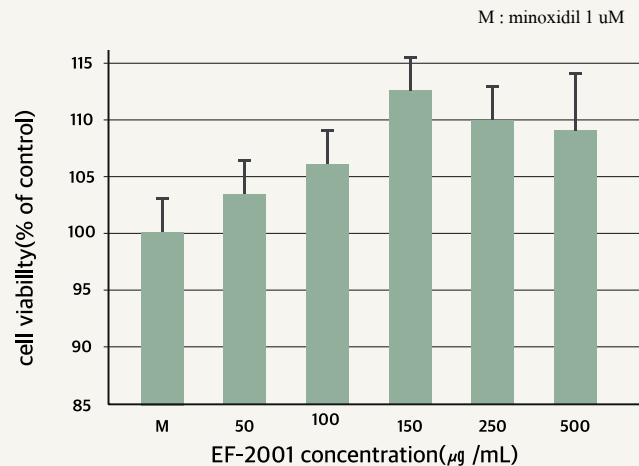
Postbiotics for hair loss care !

1 trillion EF-2001 Postbiotics cell Added

patented ingredient for anti hair loss

*EF-2001 Postbiotics(Patent No. 10-1996079)

In vitro test (Anti Hair loss Effect compared to minoxidil)



This is a study that confirms the degree of cell growth after treating human dermal papilla cells with minoxidil or different concentrations of Enterococcus faecalis EF-2001 bacteria.

As a result, as shown in Figure 1, it was confirmed that the cell growth of human breast cells treated with Enterococcus faecalis EF-2001 was enhanced by up to 12.4%, compared to the positive control group treated with minoxidil



Point 01

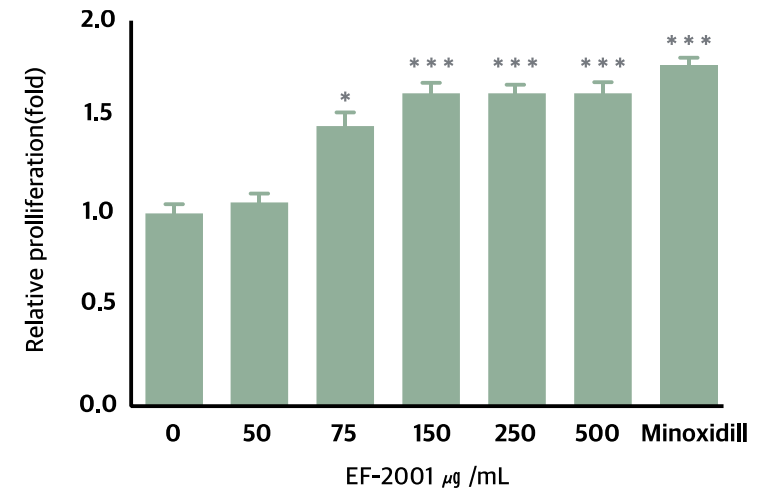
Effect of EF-2001 on HDPC Proliferation

The proliferation rate of HDPCs **increased significantly compared to MINOXIDIL** after treatment with EF-2001 (at 50, 75, 150, and 250 $\mu\text{g}/\text{mL}$ for 48 h.) At 150–500 $\mu\text{g}/\text{mL}$ EF-2001, HDPC proliferation increased 1.5-fold



Result

The high concentration of EF-2001 increased the expression. These results demonstrate the potential impact of EF-2001 on hair regrowth.



HDPCs are the positive cells placed at the very bottom of the hair roots. A lot of cells are clustered together and protected by hair follicles. They store the raw materials of hair and supply nutrients to the capillaries to help growth cells. The germinal matrix that receives this nutrients is based on this to form protein, which can be seen as a way for hair to grow well..

No.1 Postbiotics bereum

Point 02

Powerful cleansing !

guarantee **95%** cleansing power through clinical trial

GUARANTEE

A clinical study of 'Hanarin Postbiotics Anti Hair Loss Shampoo' for the scalp cleansing effect

2. Evaluation of scalp cleansing effect

The results of scalp cleansing effect using Video Microscope and Image Analysis Program are shown in Tables 2-4 and Figures 4.

The measurements were conducted before and after one-time use of the test material application. The evaluation results of scalp cleansing effect showed a 94.62% decrease after one-time use of the test material application in comparison with the pre-application. The results were statistically significant (p<.001) and suggest that the test material contributes to scalp cleansing effect. The details of the mechanical evaluation are shown in Appendix 1 and 2.

	Before	After one-time use
Average	3.01	0.16
SD	2.29	0.31

After one-time use	
Improvement rates (%)	94.62

$$\text{Improvement rate (\%)} = \frac{|\text{Post} - \text{Pre}|}{\text{Measured value Before the application}} \times 100$$

After one-time use	
p-value	.000***

*p <.05 **p <.01 ***p <.001; p-value is measured by Wilcoxon signed-rank test

Figure 4. Changes and improvement rates of waste material in scalp (%).

This report is the confidential document and property of the Korea Institute of Dermatological Sciences; its transfer, plagiarism, and disclosure to third parties is prohibited.

Table 3. Improvement rates of waste material in scalp (%)

After one-time use	
Improvement rates (%)	94.62

$$\text{Improvement rate (\%)} = \frac{|\text{Post} - \text{Pre}|}{\text{Measured value Before the application}} \times 100$$

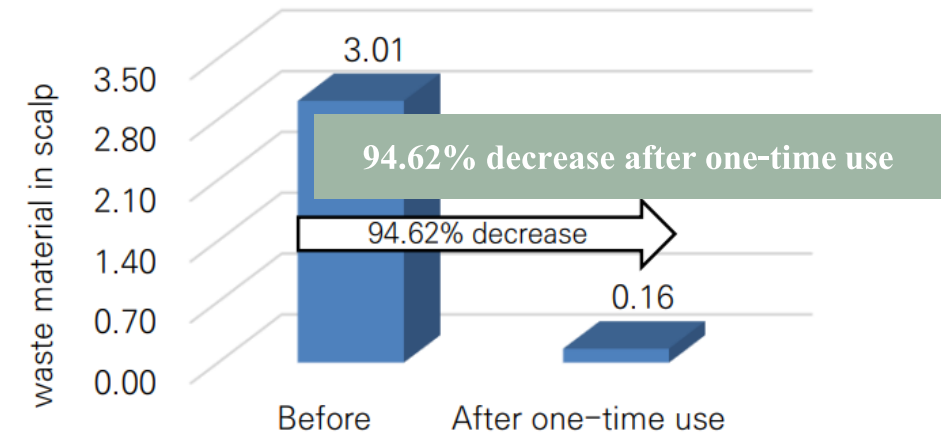
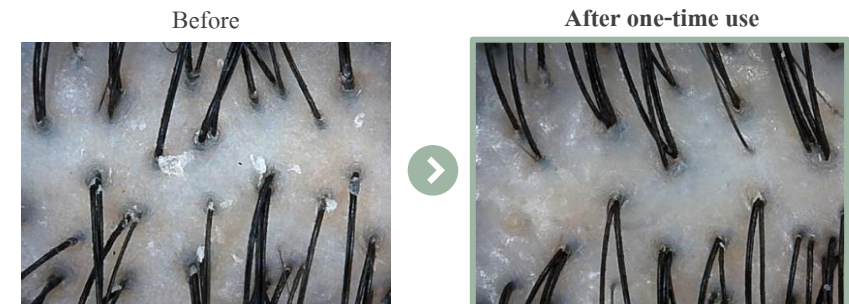


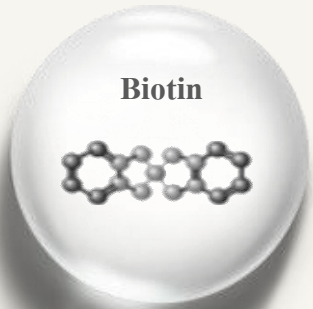
Figure 4. Changes and improvement rates of waste material in scalp(%).



No.1 Postbiotics bereum

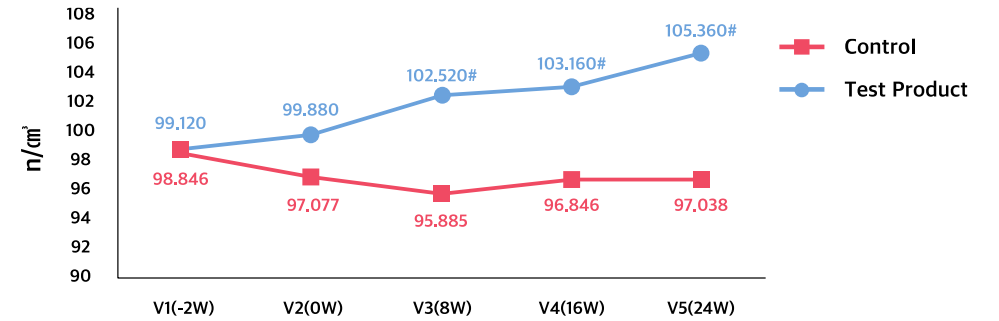
Point 03

KFDA Approval Anti-Hair Loss Formula



Clinical test

Hair Density



※ Significant difference compared to Visit 2 (Week 0)

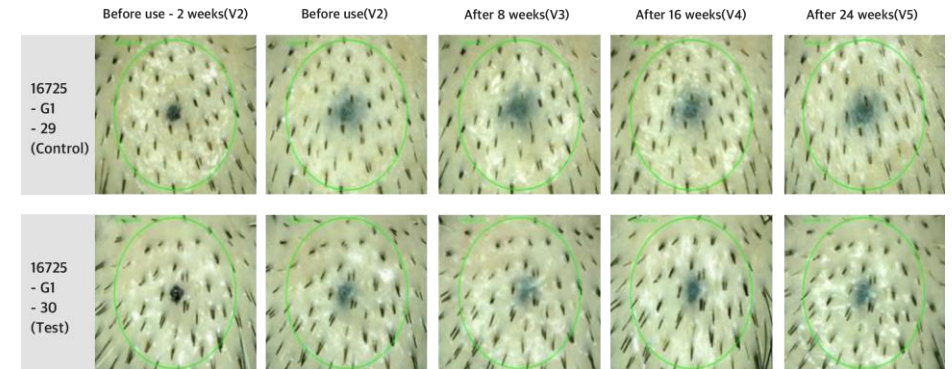
Study Design

Formula: Biotin, Dexpanthenol, Nicotinamide, Zinc, Pyrithione

Period: 24 weeks

Subject: 56

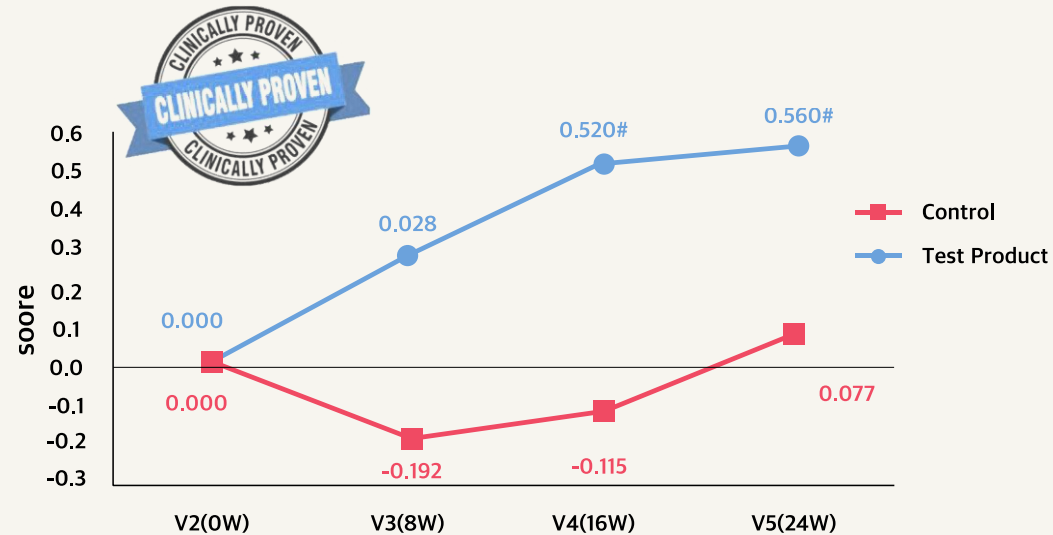
Eveluation: Hair density, visual, hair loss improvement, hair thickness improvement



No.1 Postbiotics bereum

Point 03

Visual assessment



#: $p < 0.017 (=5\%)$ by Friedman test, post hoc, Wilcoxon signed rank test with Bonferroni correction

Result:

effect of using the test product showed a significant increase ($p < 0.017$)
In contrast, the control group did not show any significant changes at any time point compared to before use.



As shown in the visual assessment graph below, after 24 weeks of using the formula, it is visually apparent that the user's hair has improved.








No.1 Postbiotics bereum

| Point 05

Natural black food

Contains 10 kinds of natural black food included !

Such as black beans, black sesame, and black rice extract, which assists hair growth .

Oryza Sativa (Rice) Extract  -Skin elasticity -Antioxidant -Anti-Inflammatory	Sesamum Indicum (Sesame) Seed Extract  -Antibacterial -Antioxidant -Whitening	Glycine Max (Soybean) Seed Extract  -Skin elasticity -Antioxidant -Anti-Inflammatory	Hordeum Vulgare Extract  -Antibacterial -Antioxidant -Anti-inflammatory	Rubus Fruticosus (Blackberry) Fruit Extract  -Whitening -Antioxidant -Anti-Aging
Ribes Nigrum (Black Currant) Fruit Extract  -Whitening -Antioxidant -Anti-inflammatory	Allium Sativum (Garlic) Bulb Extract  -Anti-Aging -Antioxidant -Skin-Conditioning	Lepidium Meyenii Root Extract  -Skin-protective -Antioxidant -Conditioning	Cuttlefish Extract  -Antibacterial -Antioxidant -Anti-inflammatory	Nigella Sativa Seed Extract  -Antibacterial -Antioxidant -Moisturizing

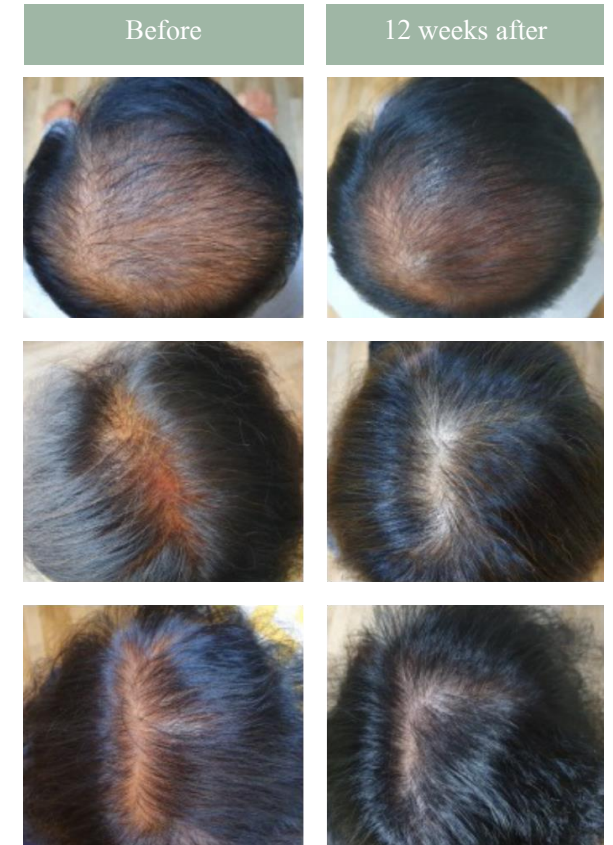


Figure 1. Image showing the haid condition after 12 weeks

Hair growth promotion with black soybean extract : case series.(2021)

Scalp led to hair growth promotion, which is thought to result from **activated breast papillary cells, expanded capillaries, and improved blood flow.**

Point 06

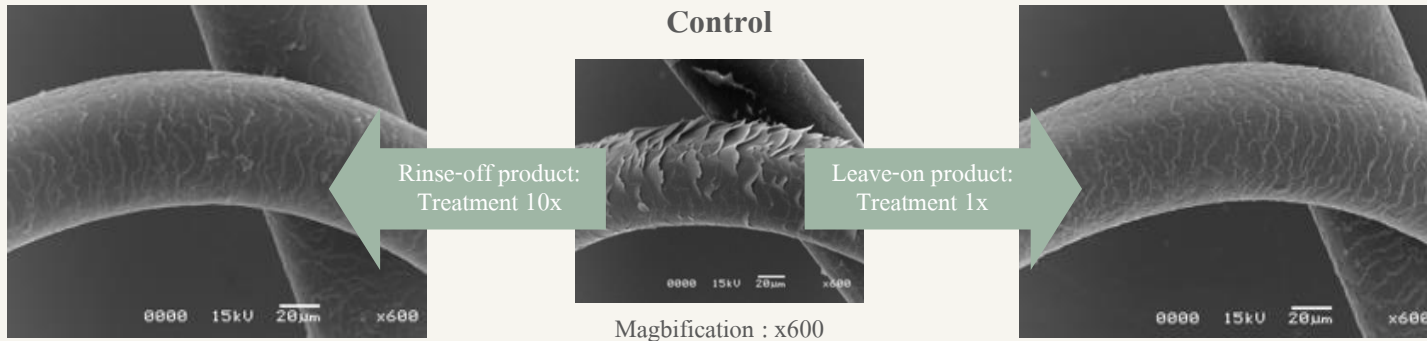
Hair Condition Improvement Formula

AQUAXYL

Xylitylglucoside - Anhydroxylitol – Xylitol - Glucose

"Combination of Glucose and Xylitol extracted from Oak and Hovenia dulcis trees."

“Moisturizes and softens rough hair.”



Magnification : x600

"Confirmed to have excellent visual improvement effects on the surface due to enhanced retention and prevention of moisture loss."



(16) **United States Patent**
Stoltz et al.
(16) **Patent No.:** **US 8,088,742 B2**
(45) **Date of Patent:** ***Jan. 3, 2012**

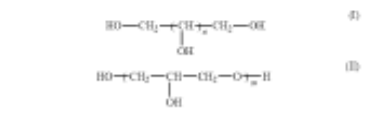
(54) **POLYOL-GLYCOSIDE COMPOSITIONS FOR THE SKIN**
(75) Inventors: Corinne Stoltz, Thiais (FR); Christine Garcia, Castres (FR); Jean-Pierre Boiteux, Saix (FR); Hervé Rolland, Castres (FR); Guy Tabacchi, Paris (FR); Alain Millus, Nice (FR)
(75) Assignee: Société d'Exploitation de Produits pour les Industries Chimiques (SEPPIC), Paris (FR)
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1207 days. This patent is subject to a terminal disclaimer.
(21) Appl. No.: 106513,643
(22) PCT Filed: Apr. 30, 2003
(86) PCT No.: PCT/FR03/01164
§ 371 (c)(1).
(2), (4) Date: Dec. 12, 2005
(87) PCT Pub. No.: WO03094864
PCT Pub. Date: Nov. 20, 2003
(65) **Prior Publication Data**
US 2006/0088491 A1 Apr. 27, 2006
(30) **Foreign Application Priority Data**
May 7, 2002 (FR) 02 05681
(51) **Int. Cl.**
A61N 43/04 (2006.01)
A61N 31/00 (2006.01)
A61K 31/79 (2006.01)
A61K 31/045 (2006.01)
C07H 1/00 (2006.01)
C07H 15/04 (2006.01)
(52) **U.S. Cl.** 514(2); 514(738); 536(1.1); 536(120)
(58) **Field of Classification Search** 514(23), 514(738); 536(1.1), 120
See application file for complete search history.
(56) **References Cited**
U.S. PATENT DOCUMENTS
4,122,205 A * 10/1978 Barge et al. 426/548
4,638,675 A * 10/1986 Liebrathaler et al. 536/17.2
5,834,330 A * 9/1998 Nagy et al. 424/85
5,891,854 A 4/1999 Thiers et al.

FOREIGN PATENT DOCUMENTS
EP 0 770 378 5/1997
FR 2 730 409 8/1996
GB 884961 * 12/1961
JP 10-158151 * 6/1998
WO 98/25142 8/1998

OTHER PUBLICATIONS
Lower, E. (1997) The cosmetic advantages of polyglycerols. *Manufacturing Chemist*, vol. 88, No. 11, p. 36-32.*
Trincese, A., Improta, R., Gambacorta, A. (1995) Enzymatic Synthesis of Polyol- and Masked Polyol-Glycosides Using β-D-Glucanase of *Saccharomyces uvarum*. *Bioanalysis and Biotechnology*, vol. 12, p. 77-88.*
Friedman, M. [Academic Dissertation] (2006) Pentitol phosphate dehydrogenases: Discovery, characterization and use in D-arabitol and xylitol production by metabolically engineered *Saccharomyces cerevisiae*.*
International Search Report for PCT/FR03/01164.
Database CA 'en ligne'; Chemical Abstracts Service, Columbus, Ohio, US; Mutsaers, Sachiyo et al. "Moisturizing cosmetics containing 'succharidin'" retrieved from STN Database accession No. 127,23570, XP002229203; and JP 09 077650, Ajinomoto Co., Inc., Japan, Mar. 25, 1997.
Database CA 'en ligne'; Chemical Abstracts Service, Columbus, Ohio, US; Uehara, Shizuko et al. "Rough skin-preventing and softening cosmetics" retrieved from STN Database accession No. 132,18941, XP002229202; and JP 2000 189155, Kao Co., Ltd., Japan, Apr. 25, 2000.
Patent Abstracts of Japan, vol. 012, No. 283(C-518), Aug. 3, 1998, and JP 63-063190, Kao Corp, Mar. 10, 1988.
Database WPI, Section Ch. Week 197744, Derwent Publications, Ltd., London, GB, Class A06, AN 1977-78724Y, XP002229203; and JP 52 114027, Iosaka, Sep. 24, 1977.
* cited by examiner

Primary Examiner — Scarlett Goon
(74) **Attorney, Agent, or Firm** — Young & Thompson

ABSTRACT
The disclosure discusses polyol-glycoside compositions for topical use. The invention provides compositions containing an efficient amount of polyol-glycoside obtained from the acetalization of a polyol with a reducing sugar. Applications for the composition include cosmetics, pharmaceuticals, and textile treatments.



7 Claims, No Drawings

No.1 Postbiotics bereum

BeauPlex® VH

All-in-one Vitamin Compound for successful Hair care !

Well-balanced composition of various vitamins provides the ideal biological activity for cosmetic formulations.

This active compound provides strengthens hair while energizing and activating the cells

Helps prevent hair loss

>> improves hair density and thickness !



From 128 to 164 hairs/cm²

28% increase on hair density
after 5-month treatment with Beauplex.

Anti-aging

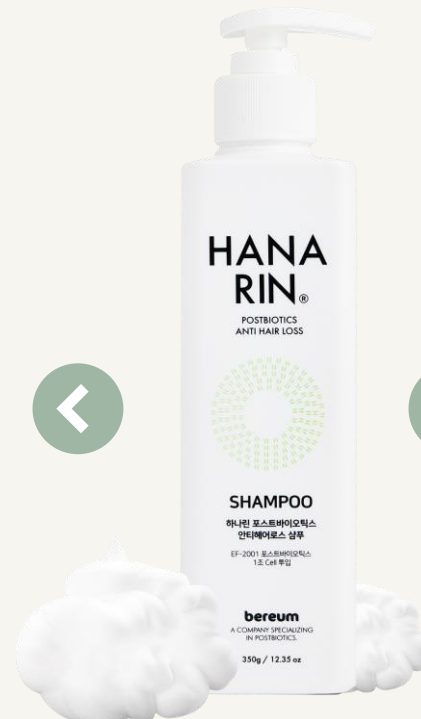
>> Helps reduce the appearance of greying hair
<anti-oxidant properties>

Results after 4 months treatment Leave-on BeauPlex® VH



Example : volunteer #60

Darker hair appearance after 4 months.
7% reduction of grey hair with Beauplex.

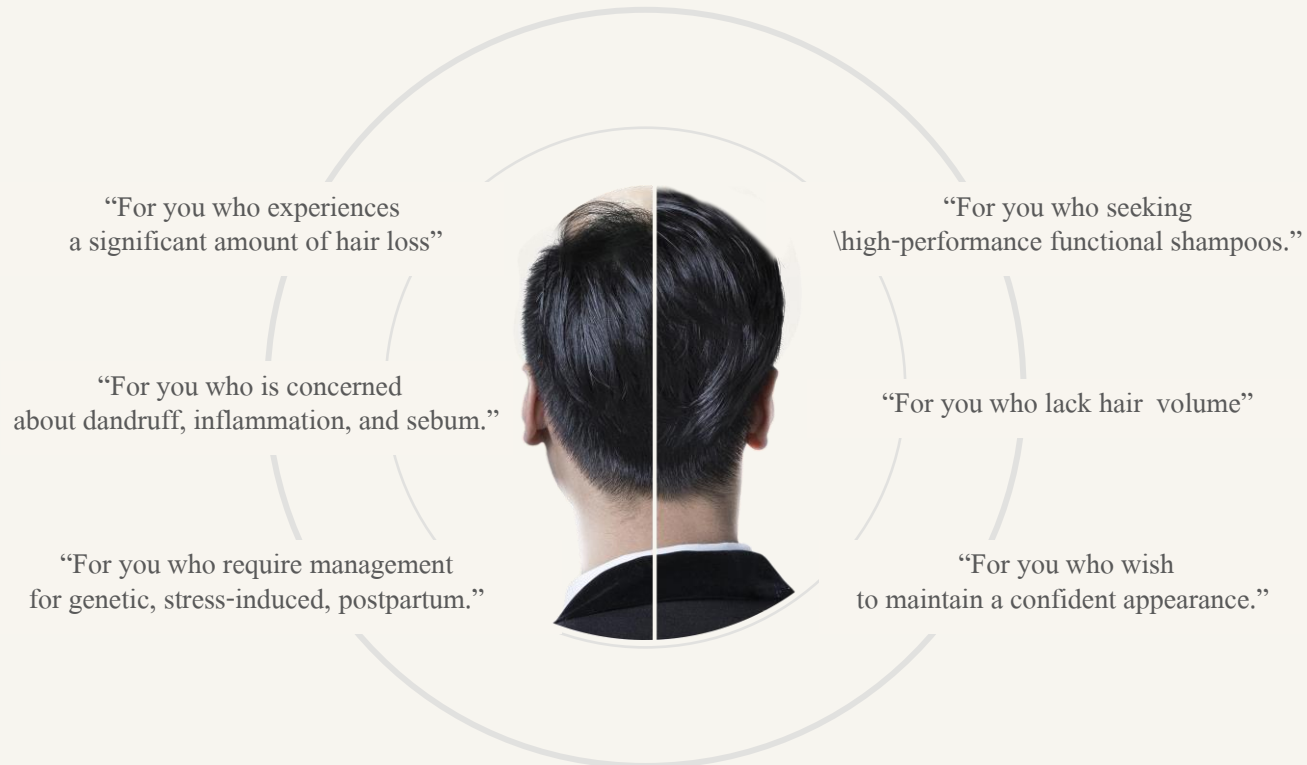


No.1 Postbiotics bereum

We recommend for it!

"Now, with confidence and courage, take off your hat!"

"For you with thin and weak hair"



Product name

Hana-rin Shampoo

Volume

350g/12.35 oz

How to use

After thoroughly wetting your hair and scalp with warm water, apply 3-5ml evenly to the scalp and massage gently. Then, remove the foam on for more than 3 minutes before rinsing thoroughly.

How to store

Avoid direct sunlight and store at room temperature.

No.1 Postbiotics bereum

Product name

HANA-RIN Postbiotics Anti-hair loss shampoo

Volume 350g/12.35 oz,

Manufacturing number and expiration date

indicated separately on the product

Consumer consultation 02-561-1185

Brand Owner

bereum Co., Ltd., 32 Bansan 1-ro, Munmak-eup, Wonju-si, Gangwon-do

Instructions for use

- After thoroughly wetting the hair and scalp with warm water, massage 3-5ml evenly onto the scalp.
- Wait for at least 3 minutes with the foam on, then rinse thoroughly.

Precautions for use

A

If you experience abnormal symptoms or side effects such as red spots, swelling or itching on the area of use after using the cosmetic or after exposure to direct sunlight, consult a specialist.

B

Refrain from using on areas with wounds.

C

Precautions for storage and handling

- 1) Store out of reach of children.
- 2) Avoid direct sunlight and store at room temperature

- I. Use only on the external genital area and do not use inside the m. vagina.
 - n. Use according to the prescribed method and dosage.
 - o. Do not use on infants under 3 years of age.
- It is advisable not to use during pregnancy, and do not use around the external genital area immediately before childbirth

Ingredients

Water	Maltodextrin
Disodium Laureth Sulfosuccinate	Calcium Pantothenate
Acrylates Copolymer	Xylitol
Sodium C14-16 Olefin Sulfonate	Butylene Glycol
Lauryl Glucoside	Sodium Ascorbyl Phosphate
Polyquaternium-7	Glucose
Lauramine Oxide	Tocopheryl Acetate
Zinc Pyrithione	Pyridoxine HCl
Citric Acid	1,2-Hexanediol
Panthenol	Glycine Max (Soybean) Seed Extract
Sodium Benzoate	Allium Sativum (Garlic) Bulb Extract
Glyceryl Caprylate	Lepidium Meyenii Root Extract
Fragrance	Hordeum Vulgare Extract
Niacinamide	Rubus Fruticosus (Blackberry) Fruit Extract
Guar Hydroxypropyltrimonium Chloride	Ribes Nigrum (Black Currant) Fruit Extract
Ethylhexylglycerin	Extract
Biotin	Cuttlefish Extract
Enterococcus Faecalis	Sesamum Indicum (Sesame) Seed Extract
Sodium Polynaphthalenesulfonate	Extract
Butyl Avocadoate	Nigella Sativa Seed Extract
Xylitylglucoside	Oryza Sativa (Rice) Extract
Anhydroxylitol	Tocopherol
Amylodextrin	Silica