

Elegantly Brighten Skin

SHUAHLIA



COSMECEUTICALS
SHLab Inc.

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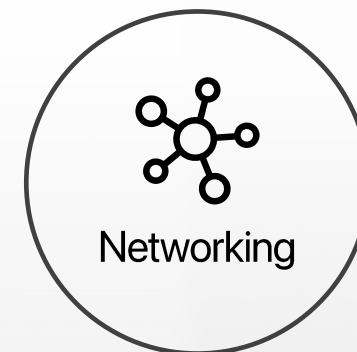
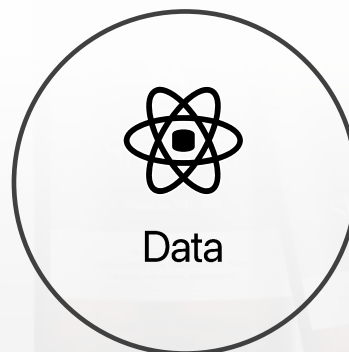
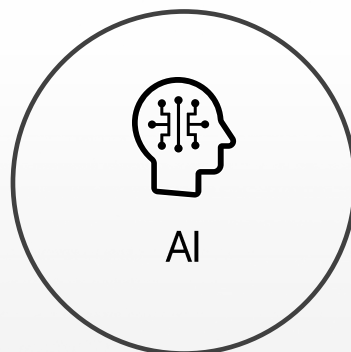
01 | ABOUT US



Founded in 2021, SHLab Inc. aims to become a global bio-leading company that creates a healthy life for mankind through R&D in pharmaceuticals and healthcare fields by applying a microbiome bacteriophage-based platform.

A bio-healthcare company that creates a healthy life with microbiome bacteriophage-based platform

Ecosystem transformation based on technological innovation



01 | ABOUT US



VISION

Business	An innovative bio-healthcare company that contributes to human health
Technology	A customer-focused company that combines biotechnology and healthcare technology
Identity	Co-prosperity with our customers and partners with our biotechnology business value

INFORMATION

Company Name	SHLAB	
Establishment Date	April 20, 2021	
Business Area	Platform technology based on microbiome bacteriophage	
	Therapeutics	Immune and Infectious Disease Treatment
	Healthcare	Cosmeceuticals, Medical devices

HEAD & BRANCH OFFICE



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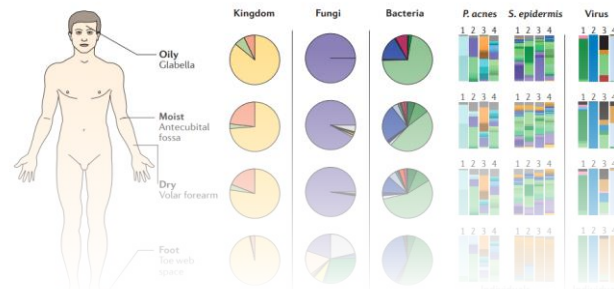
- What is Bacteriophage?**
- Bacteriophage is a collective term for virus that infect and replicate within bacterial cells.
 - **Next-generation microbiome-based bacteriophage services and products** for skin moisturizing, wrinkle improvement, and anti-aging.

MICROBIOME

The human skin microbiome

Allyson L. Byrd¹⁻⁴, Yasmine Belkaid^{3,5} and Julia A. Segre¹

Abstract | Functioning as the exterior interface of the human body with the environment, skin acts as a physical barrier to prevent the invasion of foreign pathogens while providing a home to the commensal microbiota. The harsh physical landscape of skin, particularly the desiccated, nutrient-poor, acidic environment, also contributes to the adversity that pathogens face when colonizing human skin. Despite this, the skin is colonized by a diverse microbiota. In this Review, we describe amplicon and shotgun metagenomic DNA sequencing studies that have been used to assess the taxonomic diversity of microorganisms that are associated with skin from the kingdom to the strain level. We discuss recent insights into skin microbial communities, including their composition in health and disease, the dynamics between species and interactions with the immune system, with a focus on *Propionibacterium acnes*, *Staphylococcus epidermidis* and *Staphylococcus aureus*.



The human skin microbiome, Nat Rev Microbiol. 16, 143-155 (2018)

The theme of **Microbiome**, “Focusing on the healthy distribution of bacteria in the skin and gut”

1st generation

Increase or decrease in specific strains

2nd generation

Microbial diversity control, post biotics research

3rd generation

Microbial diversity control,
Beneficial bacteria (Pre, Pro, Post biotics)
Inhibition of harmful bacteria (Bacteriophage & BPPeptides)

Patent registration and application

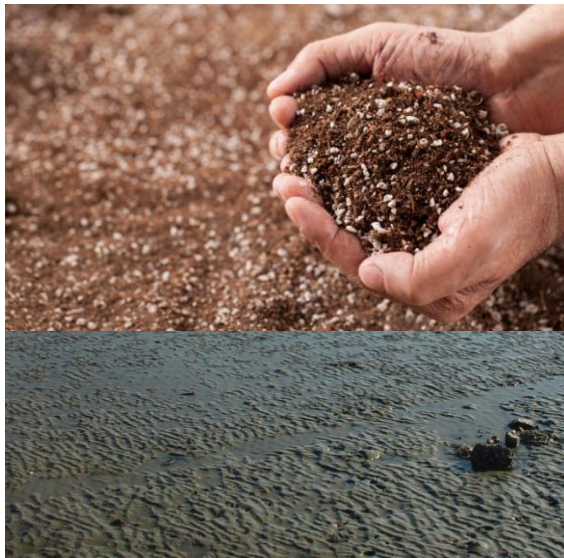
10-1606885 (A composition that reduces allergic reactions such as adenine)
10-2022-0049345 (Bacteriophage skin disease composition)
10-2023-0076968 (Composition for moisturizing skin and improving wrinkles)
10-2023-0077552 (Filler for skin wrinkle improvement and manufacturing method)

02 | CORE TECHNOLOGY

Eco-friendly bacteriophage screening through resources secured from the natural ecosystem

No. of Bacteriophage

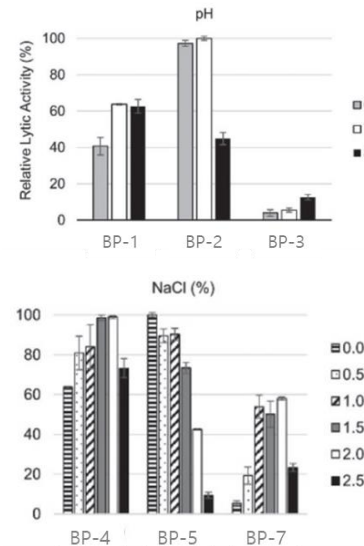
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Bacteriophage abundant
in natural ecosystem
(soil, marine, etc.)

No. of Bacteriophage

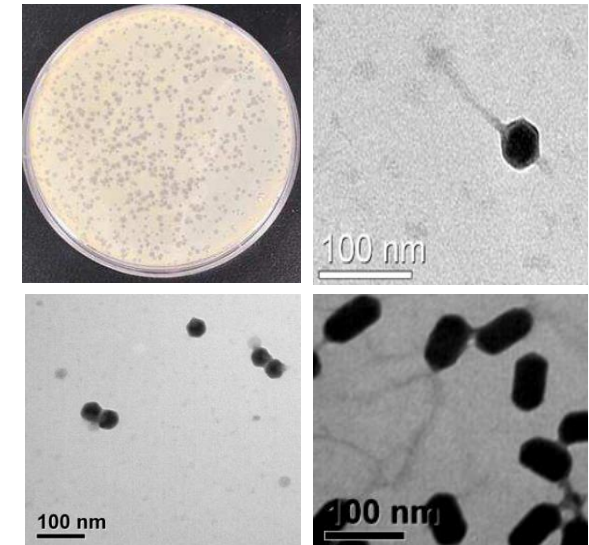
20



Screening and stability
under various conditions
(temperature, pH, salt concentration)

No. of Bacteriophage

5

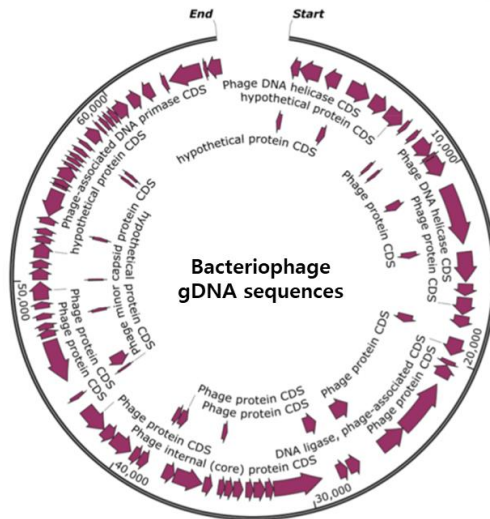


Bacteriophage selection
of specific bacteria

Bacteriophage genome analysis system through next-generation sequencing

No. of Bacteriophage

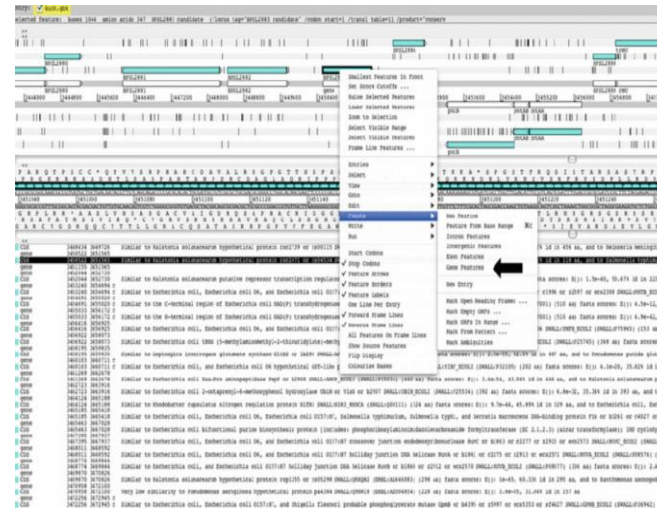
10⁴



Full sequence analysis
of bacteriophage through
next-generation sequencing

No. of Bacteriophage

20



Number	Sequence	Percentage(%)
1		
2		
3		
4		
5		
6		
7		
8		
9		

Sequencing specific peptides to identify structure and function

De novo Peptide Registration & Patent

De novo Peptide Registration

INCI Application

Date Submitted 2/16/2023	INC Review Date 4/19/2023	Assignment Date 5/25/2023
Application Number 2022-12427	Category* Biotechnology/Peptides (recombinant and solid/liquid phase)	
Trade Name* SHC-100	Publish Trade Name? ☐ No ☒ Yes	
Applicant Company* SHLab Inc.	Supplier* SHLab Inc.	

INCI Name sh-Decapeptide-2 SP

Ingredients PEPTIDES

Appearance White or off-White

Patent

No	Number of patent registration and application
1	10-1606885 (Composition that reduces allergic reactions such as adenine)
2	10-2022-0049344 (Bacteriophage immune disease composition)
3	10-2022-0049345 (Bacteriophage skin disease composition)
4	10-2023-0076968 (Composition for moisturizing skin and improving wrinkles)
5	PCT/KR2023/008623 (Composition for moisturizing skin and improving wrinkles)
6	10-2023-0077552 (Filler for skin wrinkle improvement and manufacturing method)
7	10-2023-0128396 (Composition for improving and treating immune diseases)
8	10-2023-0128397 (Improvement of problematic skin containing bacteriophage against skin flora)
9	10-2023-0126962 (Novel bacteriophage with specific killing ability against Salmonella enterica)
10	PCT/KR2023/014580 (Novel bacteriophage with specific killing ability against Salmonella)



특허청

Premium Medical Cosmetic Brand




Shuahlia



Premium Medical Cosmetic Brand



SHC-100

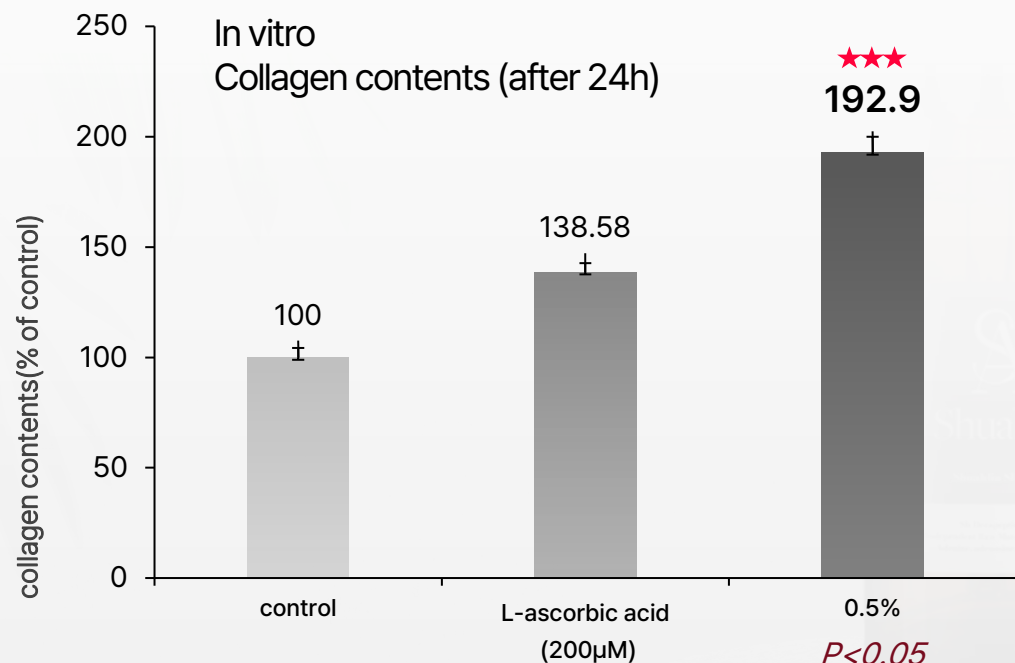
SKIN NUTRITION AMPOULE



Brand	Shuahlia	Country Of Origin	Republic of Korea
Product Name	SHC-100 SKIN NUTRITION AMPOULE	Volume	100 ml
Product Overview	SHC-100 SKIN NUTRITION AMPOULE is an anti-aging product that specializes in improving wrinkles and moisturizing. It finds the balance of stressed and tired skin caused by various external harmful environments, restores the original firmness, and improves the skin tone even brighter. Microbiome peptide substances provide nutrients to the skin and improve skin elasticity. Peptides, which are patented only by SHLab, play a role in promoting the effects of various active substances. Introducing a new concept peptide anti-aging ampoule that evenly supplies moisture and active ingredients deep into the skin with fast absorption.		
Effect	1. Wrinkle improvement 2. Moisturizes the skin 3. Skin nutrition 4. Whitening and wrinkle improvement dual functionality		
How To Use	After cleansing, apply an appropriate amount of 2-3 drops, massage evenly over face and neck for absorption.		
Caution	In case of contact with eyes, immediately rinse with running water.		



SHC Solution for skin problems – wrinkle improvement effect (SHC – 100)

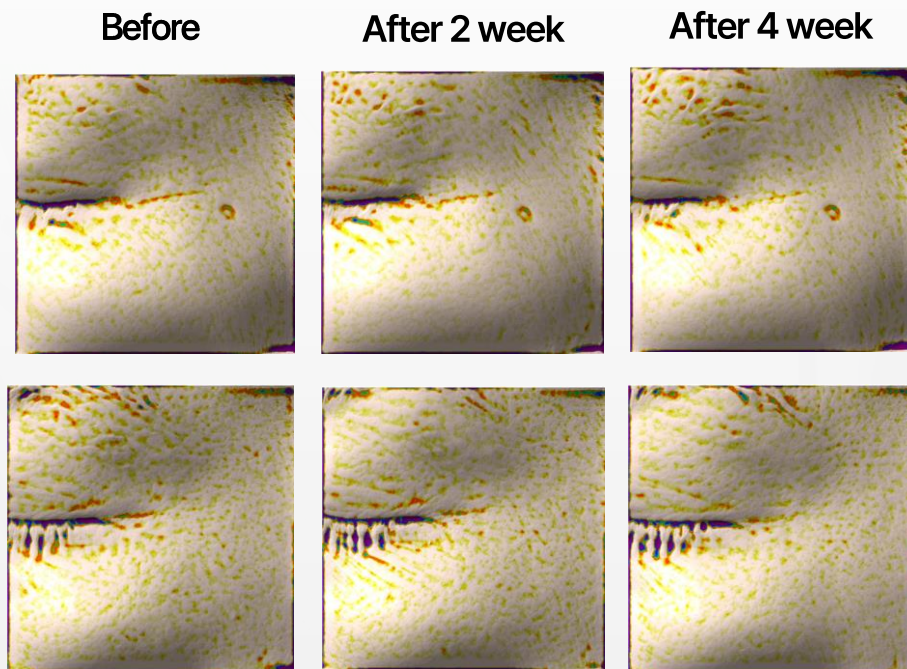


SHC-100 product increased intracellular collagen synthesis by 193% compared to the control and increased by 140% compared to the positive control, **so it is effective in improving wrinkles.**

Testing Institute Accredited certification authority Korea Testing & Research Institute (KTR)

Patent 10-2023-0076968(Composition for moisturizing skin and improving wrinkles)

SHC Solution for skin problems – wrinkle improvement effect (SHC – 100)



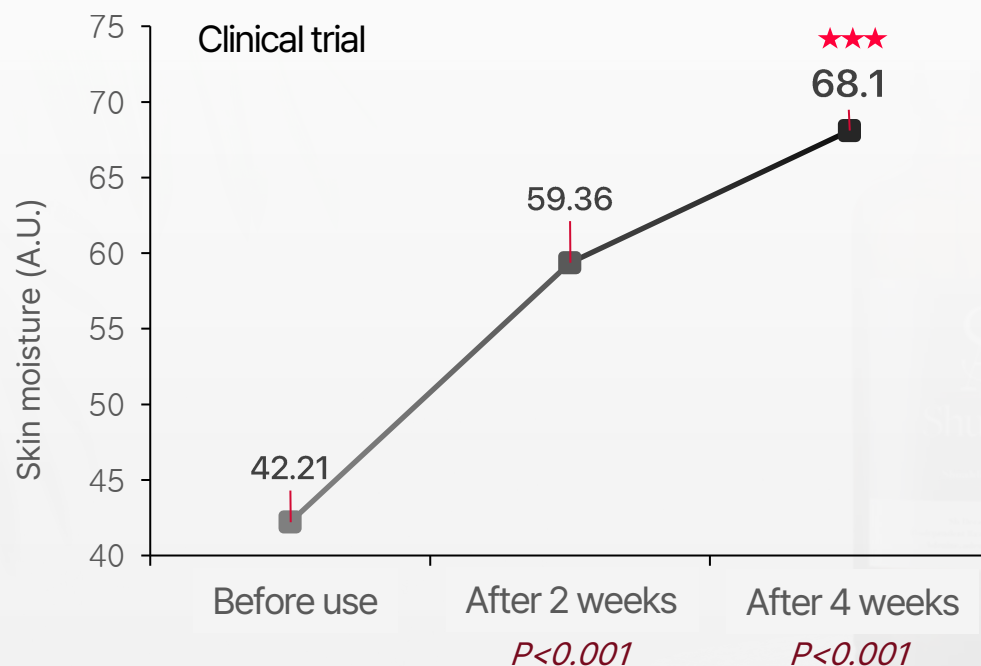
As a result of the clinical trial of SHC-100 product, it was confirmed that the wrinkle index* decreased compared to before use, **and it is judged to be effective in improving wrinkles.**

*Wrinkle index: Wrinkle improvement index using Antera 3D® CS (using the Indentation Index (A.U.) value)

Testing Institute Accredited certification authority Korea Testing & Research Institute (KTR)

Patent 10-2023-0076968(Composition for moisturizing skin and improving wrinkles)

SHC Solution for skin problems – Moisturizes the skin(SHC – 100)



SHC-100 products are Compared to before using the product, 140.62% increase in rate of change after 2 weeks of use, 161.33% increase in rate of change after 4 weeks of use

Therefore, it is effective in improving the Moisturizes the skin

Testing Institute Accredited certification authority Korea Testing & Research Institute (KTR)

Patent 10-2023-0076968((Composition for moisturizing skin and improving wrinkles)

SHC Solution for skin problems – skin irritation safety(SHC – 100)

Clinical trial

Number of registered test subject	32 persons			
Number of subjects who have completed the test	32 persons			
Gender	Male 8, Female 24			
Mean age (years old) ± Standard deviation	39.1 ± 12.2			
Test product	Skin reaction		Skin irritation	Determination
	30 minutes	24 hour		
SHC-100	0.00	0.00	0.00	non-irritating
Non-treatment	0.00	0.00	0.00	non-irritating

SHC-100 product for 24 hours Observation results of stimulation degree with closed patch***

Skin irritation index was confirmed as 0.00 "non-irritating"

* closed patch : For the purpose of adhering the test substance to the skin, gauze, patches, etc. are used to prevent detachment or contamination of the site treated with the test substance.

** stimulation degree : Criteria of the International Contact Dermatitis Research Group (ICDRG)

Testing Institute Accredited certification authority Korea Testing & Research Institute (KTR)

Patent 10-2023-0076968((Composition for moisturizing skin and improving wrinkles)

Thank you

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