



KLOTHO SKIN™



WHERE GENE  
SCIENCE MEETS  
REGENERATIVE  
SKINCARE



## KLOTHO AN AGE SUPPRESSING GENE

- Extends cell's **lifespan** and **delays aging** when overexpressed
- **Prevents DNA damage** and **prolongs cellular life**
- **Protects against both UVA and UVB** by Increasing superoxide dismutase
- klotho mediates cellular protection and improves cell survival



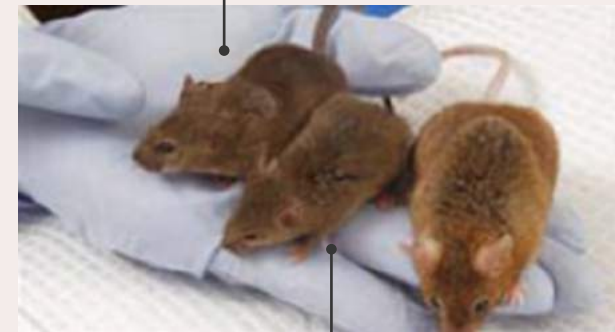
## THE KLOTHO GENE SECRET

- **The Klotho gene is the first documented aging suppressor gene in mammals** that can delay aging when overexpressed and accelerate aging when disrupted.
- **The Klotho gene was originally identified as a gene mutated in a mouse strain that exhibits a syndrome resembling human aging** including a shortened lifespan, skin atrophy, muscle atrophy, neuronal degeneration, arteriosclerosis, osteoporosis, and pulmonary emphysema.
- **In contrast, overexpression of the Klotho gene extends the lifespan of the mouse living 31% longer and remaining younger in all systems.** FOXO1 is increased resulting in an increase in superoxide dismutase which serves to protect cells from oxidative stress.



The secret gene to  
unlock eternally  
youthful skin

**NORMAL MOUSE**



**KLOTHO DEFICIENCY**

A 2-month-old mouse deficient in the Klotho protein shows signs of premature aging (center). Compared with a normal mouse (left).



FIRST TO MARKET

## GROUNDBREAKING MANUFACTURING

- **Pioneered development** of genetically enhanced **cell lines** to produce the **Klotho protein**
- **Patented** process utilizing advanced **genetic engineering** techniques to modify adult **mesenchymal stem cells** upregulating the **Klotho gene**, leading to the production of the **Klotho protein** and second-generation growth factors.
- Our Technology and Process
  - Construct a klotho containing plasmid vector with mammalian selection markers
  - Transfect the primary skin cell lines with the gene promoter
  - Generate a skin cell line that both expresses and secretes the klotho protein in the cell conditioned medium
  - Detect and quantify the Klotho protein in the cell conditioned medium produced by the Klotho expressing cell lines
  - Final product is a blend of cell conditioned medium (25%) with other ingredients
- **Clean and Sustainably Sourced Ingredients**



An unmatched  
achievement

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Liposome technology  
allows penetration  
of the Klotho protein  
into the skin

## MECHANISM OF ACTION (MOA)

### **Activation of FOXO1**

Klotho activates FOXO1, a transcription factor that plays a critical role in cellular stress responses, including longevity and tumor suppression, and repairs damaged DNA. FOXO1 also increases Sodium oxide dismutase and Catalase. This results in increased resistance to oxidative stress as well as longevity and anti-aging.

### **Antioxidant Defense**

Klotho helps combat oxidative stress, a significant contributor to skin aging and DNA damage.

### **Regulation of Inflammation**

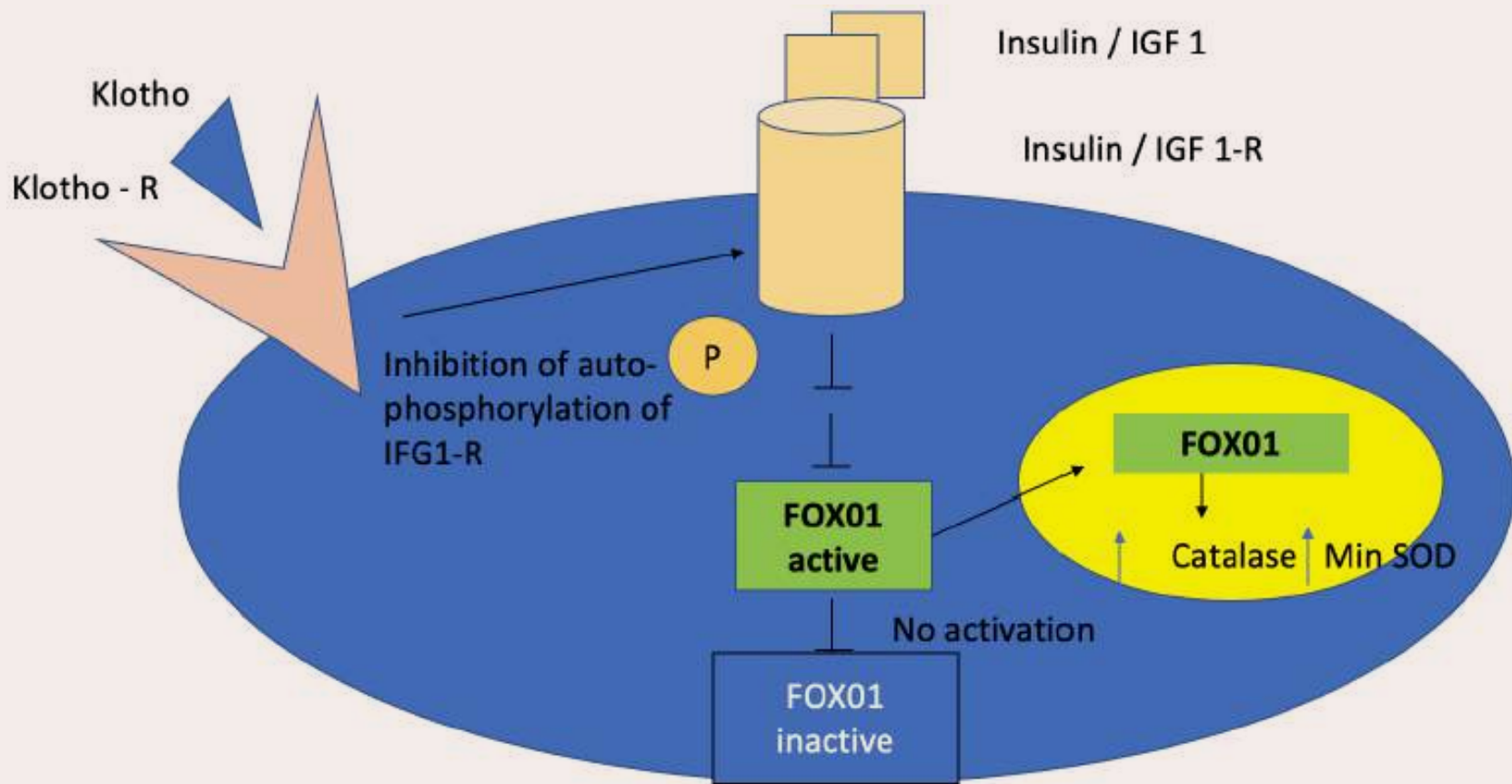
Klotho can reduce inflammatory responses, which are often detrimental to skin health and DNA integrity.

### **Promotion of Cellular Longevity**

By promoting cellular health and preventing excessive oxidative damage, Klotho encourages a more robust regenerative process.

### **Balanced Cell Growth and Apoptosis**

Klotho helps maintain a balance between cell growth and programmed cell death (apoptosis), ensuring a healthy turnover of skin cells.





A woman with dark hair, smiling and looking upwards, is the central figure on the left. The background is a soft, pinkish-purple gradient with a glowing, golden DNA double helix structure that spirals across the frame. A semi-transparent dark grey circle is positioned on the right side, containing the product name and category.

HOME-USE PRODUCTS

# KLOTHO PROTEIN IN A SERUM





First and only skin care line to work with genetically enhanced cells.

REGENERATIVE · PREVENTATIVE · PROTECTIVE

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## CLINICAL TRIAL 1

# THE REVOLUTIONARY GENE FOR SKIN REGENERATION

- 10 Subjects
- 9 Female , 1 Male
- Applied KlothoSkin twice daily for a three-month period

**BASELINE**

**3 MONTHS**

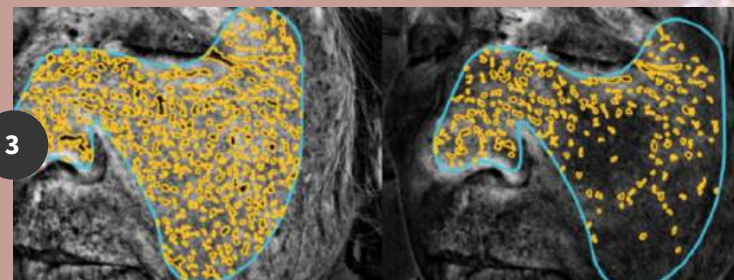
3 Month Results: 30% Reduction in Wrinkles



3 Month Results: 31% Improvement in Texture



3 Month Results: 30% Reduction in Photodamage





## CLINICAL TRIAL 2

# A DOUBLE-BLINDED STUDY

- A Double-Blinded Pilot Proof of Concept Study to valuate the Efficacy and Safety of Klotho Gene Protein to Ameliorate Signs of Aging Skin (20 patients 4 controls)
- Protocol IRB Number: klothiskin.2022. Study period: 12 weeks Investigators: Pearl E. Grimes, M.D. Vitiligo & Pigmentation Institute Of Southern California

35%

Reduction in Photodamage

18.17%

Reduction in Melanin

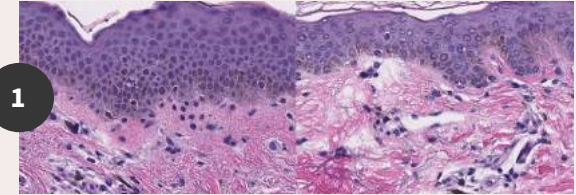
11%

Reduction in Erythema

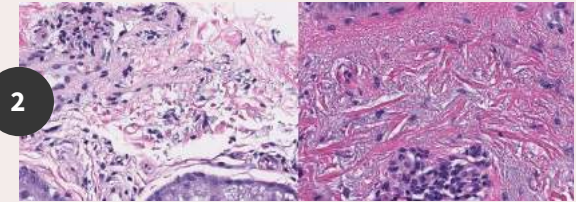
36.5%

Reduction in Dyschromia

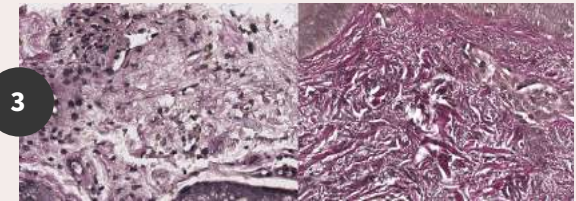
Histology of Dermal layer showing decrease in Photodamage



Histology of Dermal Layer showing increase in collagen



Histology of Dermal Biopsy showing increased Collaqaen and Elastin



27.6%

Reduction in Wrinkles

## AGE SUPPRESSING KLOTHO GENE



Before and After  
**12 Weeks**



**BASELINE**



**WEEK 12**



# UNLOCKING SKIN'S REGENERATION



Right Profile  
**12 Weeks**

**BASELINE**



**WEEK 4**



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# THE REVOLUTIONARY GENE FOR SKIN REGENERATION



Left Profile

12 Weeks



BASELINE

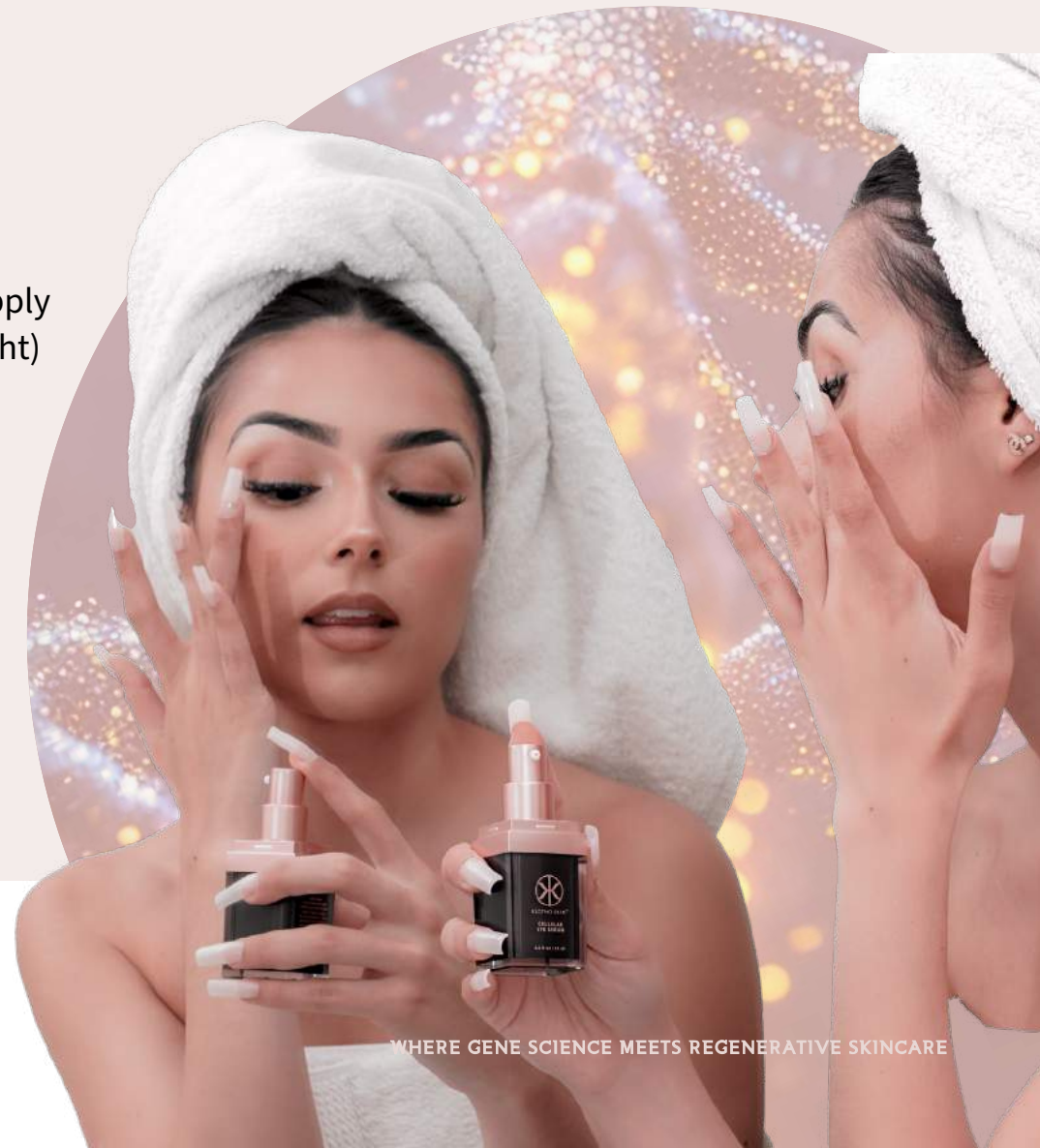


WEEK 4



## HOME-USE PROTOCOL

- **Cleansing:** Wash your face with a gentle cleanser to remove impurities
- Application **Frequency:** For preventive measures, apply Klotho Skin Face serum twice daily (morning and night)
- **Amount** to Use: Dispense a pea-sized amount of the cream and gently massage it into the skin using upward circular motions
- **Sun Protection:** Even with Klotho Skin cream's protective properties, always apply a sunscreen when exposed to sunlight to ensure maximum prevention of sun damage



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## PROFESSIONAL-USE PRODUCTS

# KLOTHO SERUM

- A groundbreaking alternative to PRP
- Containing the Klotho protein and second-generation growth factors



Extend skin cells life,  
reverse photodamage,  
and protect DNA





## ABOUT US

### Origin

In 1997, scientists discovered a gene that can extend the lifespan of cells. Researchers studied the Klotho gene, and found that its age-suppressing properties can be activated.

Klotho Skin's founder, a geneticist and medical doctor, developed a patented process to create a cell-conditioned medium containing the Klotho protein as well as second generation growth factors. This is what makes up 25% of the Klotho Face Serum. 20 years in the making, the Klotho Skin formula has been designed to rejuvenate, restore and renew your skin for a more youthful appearance.

### Evolution

The Klotho Skin Lab was the first to isolate human adult mesenchymal cells, which are genetically modified to upregulate

the Klotho Gene and produce Klotho protein, as well as catalyzing second generation growth factors. Through meticulous assay tests and refinements, the team at Klotho Skin discovered the optimal concentration levels of the Klotho protein, second generation growth factors, and the Klotho protein to help elongate the life of skin cells. Klotho Skin may be the first skincare line to be preventative, regenerative, and protective.

### Inspiration

Klotho skin's mission is to offer a solution to decrease the appearance of aging skin through utilizing the Klotho protein and second generation growth factors.

Klotho Skin ingredients are clean, sustainably sourced, and proven effective. Klotho Skin is dedicated to elongating cellular life.

# AWARDS

NEW WORLD REPORT



**NORTH AMERICA  
BUSINESS  
AWARDS**

Most Innovative Anti-Aging  
Skincare Brand 2023 (USA)



Beauty Innovations

KLOTHOSKIN.COM



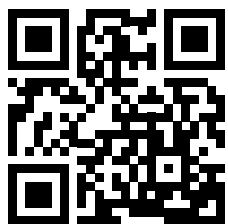




KLOTHO SKIN™

## READY TO EXPERIENCE THE KLOTHO SKIN DIFFERENCE?

Transform your skin with the power of gene science and regenerative skincare. Klothoskin harnesses cutting-edge technology to bring you personalized skincare solutions that rejuvenate and restore your skin's natural beauty.



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Call us today at **1 (415) 400-5447**  
or visit our website at **[klothoskin.com](https://klothoskin.com)**  
to learn more and start your journey  
towards healthier, more radiant skin.