



LEADING PEPTIDE MANUFACTURER  
WITH PATENTED TECHNOLOGY

Recommended by  
World-renowned Scientists



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## Our Products

# A Wide Range of Cosmetic Peptides

High Purity Powders with Advanced  
Patented Technologies

Solutions with Patented Formulas  
Created in GMP Environment

- Singular Peptide Solutions
- Complex peptide solutions

## High Purity Peptide Powders

"We have made a significant breakthrough in kilogram-scale production of high purity peptides. Our unique liquid-phase synthesis technology has the shortest synthetic routes and avoids using any chromatographic purification, which allows us to produce kilograms of pure peptides in a single batch. This process is much faster, more cost-efficient, and eco-friendly."

- Dr. Gengli Yu  
 Founder & Principal Scientist



## Formulated Peptide Solutions

We have more than 20 singular peptide solutions and 10 patented Complex peptide solutions.

Our solutions are created using the company's self-manufactured high purity peptide powder. All products are made in a GMP-standard sterilized area.

We also make custom solutions based on the customer's requirements for formula and concentration.



## Making Your Skin Brighter, Younger and Healthier

### ➤ What are peptides?

Peptides, made of amino acids, are the building blocks of proteins. These peptide chains can be absorbed by the skin, where they are able to deliver anti-aging benefits, such as stimulating collagen production and fighting lines and wrinkles.

### ➤ How do peptides work in Skin Care?

Different kinds of peptides work in different ways. For example, copper peptides enhance regeneration and healing, and increase skin firmness; some tetrapeptides stimulate new collagen growth; acetyl hexapeptide-8 has a relaxing effect on the facial muscles, minimizing movement and the formation of wrinkles.

### ➤ Who should use skin-care products with peptides?

Peptides are becoming more and more prevalent in skin care. Anyone can use peptide cosmetics to serve their needs in skin care or hair care. Unlike many other active ingredients, peptides generally have no side effects.

## Why Buy Cosmetic Peptides From JiTai Biotech Company?

We Are a Science-based company recommended by world-renowned scientists and customers.

“ If you want pure copper peptides, go to [jitaibiotech.com](http://jitaibiotech.com). ”

– Dr. Loren Pickart  
Inventor of GHK copper peptide,  
Founder of ProCyte and Skin Biology



# Copper Peptide, Dr. Loren Pickart, and Us

Copper peptide is an innovative skin care ingredient. It is known for its ability to reduce the appearance of fine lines and wrinkles, boost the production of collagen and elastin, and restore skin elasticity and strength.

In the 1970s, Dr. Loren Pickart discovered GHK copper peptide and became the world's most famous expert in copper peptide research. In the 1980s, Dr. Pickart founded ProCyte and brought it to Nasdaq. He later established Skin Biology, another famous professional skin care company.

Copper peptide was JiTai Biotech's first product. Dr. Gengli Yu, our founder and principal scientist, led a team of PhDs and successfully developed leading patented technologies to produce high quality peptides. In 2014, JiTai Biotech Company became Skin Biology's peptide supplier.



During our years of collaboration, Dr. Pickart has been a strong supporter of JiTai Biotech Company. He tells those interested in peptide powder, "if you want copper peptide, go to [jitaibiotech.com](http://jitaibiotech.com)." Dr. Gengli Yu and Janet Du visited Dr. Pickart and his wife in Seattle at the end of 2017. He had just published his new book, "GHK Copper Peptides for Skin and Hair Beauty."



Dr. Pickart is a faithful fan of Albert Einstein, and left the most striking place on his desk for his portrait. During lunch, Dr. Pickart expressed that there is always more to learn about copper peptide and its broad applications in different fields such as health care, skin care, and nutrition.

In September 2021, JiTai Biotech brought a video crew to visit Dr. Pickart again for a scientific interview. In the video, Dr. Pickart shared interesting stories about how he discovered copper peptide and the breakthroughs that most surprised him. The most important findings after its discovery will be included in his new book, "GHK and DNA: Reducing the Diseases of Human Aging." The video can be found on Youtube with the title "Interview With Dr. Loren Pickart."



# Advanced Patented Technologies

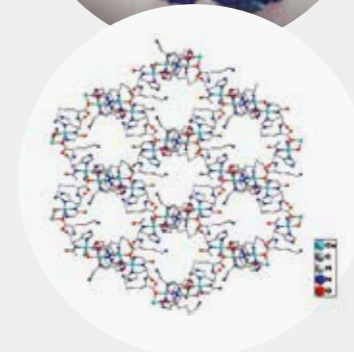
## Copper Peptide

Our copper peptides have been widely used in high-end skin care products for their proven ability to repair daily skin damage, remove wrinkles, and delay signs of aging.

Dr. Loren Pickart uses JiTai Biotech peptides in his skin care products and recommends the brand as the best source for copper peptides.

### Comparison Between JiTai Biotech and Other Brands

	JiTai Biotech Brand	Other Brands
Appearance	Crystal powder, blue, salt-like in consistency	Freeze-dried powder, blue, flour-like in consistency
Technology	No preparative HPLC and lyophilizer used; eco-friendly	Preparative HPLC and lyophilizer used; large solvent consumption
Stability	High	Low
Moisture absorption	No	Yes
Adhesion	Not sticky; good liquidity	Prone to stick on bottle wall
Storage	Easy to weigh and store	Difficult to weigh and store



In our lab, our unique patented technologies allow us to grow large, high-purity copper peptide crystals.



- High purity copper peptide crystal and its single crystal X-ray absorption spectroscopy

## Copper Peptide High Purity Powder and Formulated Solutions



- Crystal Powder Product ( Purity > 99% )

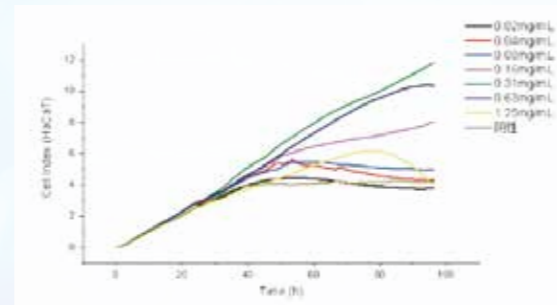
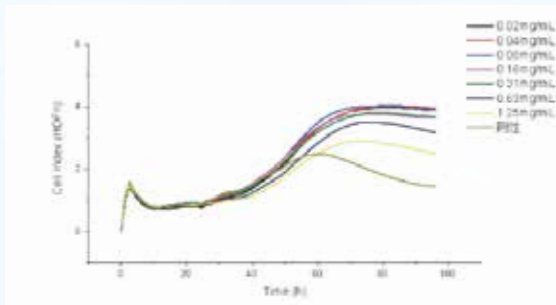


- Solution Product ( 1000 ~ 20000ppm )

## Efficacy Tests

### JiTai Biotech GHK-Cu Cell Proliferation Efficacy Test

- Significant effect on the proliferation of HaCaT cells (human immortal epidermal cells).
- At 0.31 mg/mL, the relative viability of cells reached 2.8 times that of the negative control.
- Significant effect on the proliferation of HDFn cells (human epidermal fibroblasts-neonatal).
- At 0.31 mg/mL, the relative viability of cells reached 2.5 times that of the negative control.

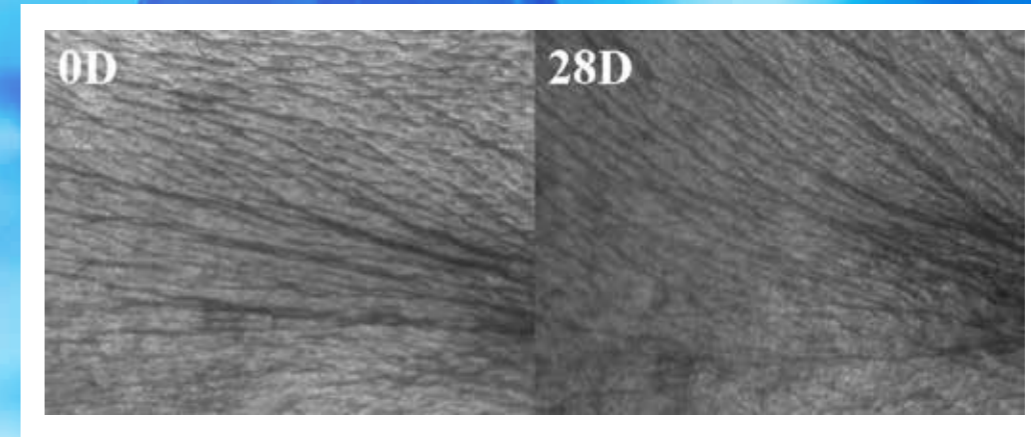
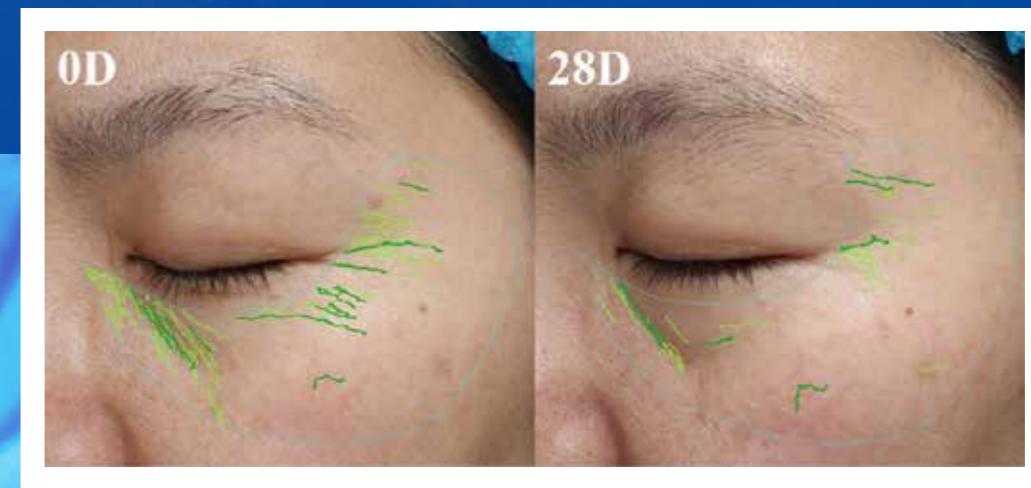


### JiTai Biotech GHK-Cu Anti-Wrinkle Efficacy Test







➤ Sample: 0.1% JiTai Biotech GHK-Cu

Wrinkles of the testers were significantly reduced. The average value of facial roughness decreased by 19.91% and 32.00% on the 14th day and 28th day respectively.

On the 28th day, the change of the facial roughness value showed a significant difference ( $0.001 < P < 0.01$ ).










## HAIR & EYELASH GROWTH

-   Biotinoyl Tripeptide-1
-   AHK-Cu
-  Hair Growth & Care Essential Peptide Solution
-  Eyelash Promoter Peptide Solution

## ANTI-WRINKLE & TIGHTENING

-   Copper Tripeptide-1 (GHK-Cu)
-   Tripeptide-1 (GHK)
-   Tripeptide-29 (Collagen)
-   Palmitoyl Tripeptide-1 (Pal-GHK)
-   Palmitoyl Tetrapeptide-7 (Pal-GQPR)
-   Palmitoyl Pentapeptide-4 (Pal-KTTKS)
-   Hexapeptide-11
-  Firmness & Elasticity Enhancing Peptide Solution
-  Extensive Anti-Wrinkle Essential Peptide Solution

## RAPID WRINKLE REPAIR

-   SYN-AKE Substitute
-   Acetyl Hexapeptide-8
-   Acetyl Octapeptide-3
-  Instant Anti-Wrinkle Essential Peptide Solution





## SKINCARE AROUND THE EYES

-  Extensive Eye Care Peptide Solution





## EYE BAG REDUCTION




-   Dipeptide-2

## BRIGHTENING & LIGHTENING

-   Nonapeptide-1
-  Lightening & Brightness Enhancing Peptide Solution
-  Pigmentation, Acne, & Inflammation Reducing Peptide Solution

## MUSCLE RELAXATION & SKIN COMFORT

-   Acetyl Dipeptide-1 Cetyl Ester
-  Sensitive Skin Anti-Wrinkle & Elasticity Enhancing Peptide Solution
-  Sensitive Skin Anti-Inflammation Soothing Peptide Solution

-  High Purity Powder
-  Singular Peptide Solution
-  Complex peptide solutions



## JTbiotech® Peptide Powder & Singular Peptide Solutions

INCI NAME	PURE POWDER	SOLUTION (ppm)	FUNCTION	DOSE
<b>ANTI-WRINKLE &amp; TIGHTENING</b>				
JTbiotech® Copper Tripeptide-1 (GHK-Cu) (Patent No. CN113150066B)	Blue	20000	Efficiently repairs damaged skin by promoting the production of critical skin proteins such as collagen and dermal substrates; Reduces wrinkles, improves skin elasticity and firmness, increases skin thickness, and tightens skin; Reduces inflammation and relieves skin redness and swelling	2.5-10%
JTbiotech® Tripeptide-1 (GHK)	Off-white	20000	Used as activators for tissue remodeling; Slows down aging; Reduces wrinkles; Reduces inflammation and redness; Lip fullness and moisturizing	2.5-10%
JTbiotech® Tripeptide-29 (Collagen) (Patent No. CN114702546B)	Off-white	5000	Enhances cell activity of fibroblasts; Enhances skin elasticity, reduces fine lines, promotes skin firming	1-2%
JTbiotech® Palmitoyl Tripeptide-1 (Pal-GHK)	Off-white	1000	Stimulates collagen and supplements the skin matrix, thereby reducing wrinkles and tightening the skin; Improves skin elasticity	1-3%
JTbiotech® Palmitoyl Tetrapeptide-7 (Pal-GQPR) (Patent No. CN112830956B)	Off-white	500	Reduces skin inflammation and the accompanying skin damage; Stimulates the regeneration of collagen fibers in the dermis by acting as a cellular messenger; Mainly used in anti-aging products for its ability to lighten skin and improve skin elasticity	1-3%
JTbiotech® Palmitoyl Pentapeptide-4 (Pal-KTTKS)	Off-white	500	Achieves significant anti-wrinkle effects by repairing the matrix and epidermis-dermis junction; Stimulates the expression of wound healing genes; Stimulates skin fibroblasts to reconstruct extracellular matrix; Stimulates synthesis of collagen I and IV, and fiber cell proteins	1-3%

INCI NAME	PURE POWDER	SOLUTION (ppm)	FUNCTION	DOSE
<b>ANTI-WRINKLE &amp; TIGHTENING</b>				
JTbiotech® Hexapeptide-11	Off-white	2000	Effectively enhances skin firmness and elasticity; Stimulates the production of collagen, reduces fine lines and wrinkles; Brightens the complexion; Fights signs of aging and increases water retention capacity	1-5%
<b>RAPID WRINKLE REPAIR</b>				
JTbiotech® SYN-AKE Substitute (AKE-Pro)	Off-white	2500	A new chemical with a similar structure to SYN-AKE that operates on the same mechanism. It prevents the muscles' uptake of sodium by working on the mnAChR receptor, thus inhibiting the transmission of nerve impulses to the muscles and causing them to stay relaxed. This effectively improves skin texture and replenishes lost collagen. It also rapidly removes wrinkles, especially around the forehead and eyes.	1-8%
JTbiotech® Acetyl Hexapeptide-8	Off-white	2000	Known as the famous "Botox-like" peptide that immediately removes wrinkles: muscles are contracted when they receive neurotransmitters from vesicles. The product competes with the natural protein for a position in the SNARE complex, inhibiting vesicles from releasing neurotransmitters. Therefore muscle contraction is attenuated, preventing the formation of lines and wrinkles; The product can also stimulate the production of collagen and promote hydrating abilities	1-8%
JTbiotech® Acetyl Octapeptide-3	Off-white	1000	Has a similar mechanism to the popular acetyl hexapeptide-8. Reduces muscle contractions which results in a more relaxed and line-free face, especially around the forehead and eyes; Repairs wrinkles and scars; Promotes the generation of elastin and collagen for smoother and younger skin	1-8%
<b>MUSCLE RELAXATION &amp; SKIN COMFORT</b>				
JTbiotech® Acetyl Dipeptide-1 Cetyl Ester	Off-white	3000	Stimulates the release of the endorphins, relaxing the skin; Decreases discomfort of the skin and relieves skin tension by increasing the skin's tolerance to internal and external stimulation; Promotes the formation of elastic fibers to improve the toughness of the skin	3-12%

## JTbiotech® Patented Complex Peptide Solutions

INCI NAME	PURE POWDER	SOLUTION (ppm)	FUNCTION	DOSE
<b>BRIGHTENING &amp; LIGHTENING</b>				
JTbiotech® Nonapeptide-1	Off-white	1000	Safely and efficiently inhibits the formation of melanin: competes with MSH (Melanocyte-Stimulating hormone) by binding with MC1-R receptors, making MSH unable to activate tyrosinase and form melanin, thereby preventing and reducing pigmentation; Enables better control of skin tone and brown spots; Stops the excessive production of melanin	1-5%
<b>HAIR GROWTH &amp; CARE</b>				
JTbiotech® Biotinoyl Tripeptide-1 (Biotin-GHK) (Patent No. CN111004304B)	Off-white	2000	Stimulates the metabolism of hair follicle cells, thus stimulating hair growth; Delays hair follicle aging, improves hair follicle structure, and prevents hair loss; Activates tissue repair gene expression, improves the reconstruction and repair of skin, and promotes cell proliferation and differentiation	1-5%
<b>EYE BAG REDUCTION</b>				
JTbiotech® Dipeptide-2	Off-white	1000	Removes eye bags and dark circles: as an effective angiotensin-converting enzyme (ACE) inhibitor, it can improve blood circulation by inhibiting the conversion of angiotensin I to angiotensin II; Anti-wrinkle effect through promoting the synthesis of skin proteins	1-8%

PRODUCT NAME	ACTIVE INGREDIENT	FUNCTION	MECHANISM	DOSE
<b>RAPID WRINKLE REPAIR</b>				
JTbiotech® Instant Anti-Wrinkle Essential Peptide Solution	DIPEPTIDE DIAMINOBTUROYL BENZYLAMIDE DIACETATE, ACETYL HEXAPEPTIDE-8, HEXAPEPTIDE-11	Instantly removes expression lines and fine lines. Continuous use can effectively prevent the appearance of wrinkles. Improves deep wrinkles and makes skin smooth and soft	Two neurotransmitter peptides work together to block signal transmission from nerves to muscles, inhibiting surface muscle contraction and instantly eliminating facial lines caused by expressions; at the same time, elastin peptides quickly repair fine lines and improve skin moisture. Long-term use can reduce expression wrinkles, improve skin texture, and replenish collagen	1-8%
<b>ANTI-WRINKLE &amp; ANTI-AGING</b>				
JTbiotech® Firmness & Elasticity Enhancing Peptide Solution (Patent No. CN112807240A, pending)	ACETYL HEXAPEPTIDE-8, HEXAPEPTIDE-11, GLUTATHIONE	Improves skin elasticity, firmness, and skin tone. Replenishes collagen to prevent the appearance of wrinkles. Is an antioxidant, eliminates free radicals and toxins, maintains and restores youthful skin. Long-term use can remove fine lines, expression lines, and deep wrinkles	Three peptides work together to remove various wrinkles caused by collagen loss and excessive muscle contraction. The first peptide promotes the synthesis of elastin and collagen by fibroblasts, and improves skin elasticity and firmness; the second is an anti-oxidant that removes free radicals and harmful substances, brightens skin, and prevents new wrinkles. The third inhibits the release of neurotransmitters from neurons to muscles, reducing expression lines caused by surface muscle contraction	1-8%
JTbiotech® Extensive Anti-Wrinkle Essential Peptide Solution (Patent No. CN112716826B)	TRYPEPTIDE-1, PALMITOYL TETRAPEPTIDE-7, PALMITOYL PENTAPEPTIDE-4, ACETYL HEXAPEPTIDE-8,	Rejuvenates skin, repairs damaged cells, and restores cell vitality. Promotes collagen regeneration, removes expression lines and stubborn wrinkles, and prevents new wrinkles from appearing. Makes skin more firm, thick, and smooth, and balances skin tone	Four peptides powerfully remove wrinkles and tighten the skin. The anti-aging repair tripeptide promotes collagen fiber regeneration, increases skin thickness, improves epidermal cell youthfulness, and repairs damaged cells; the anti-aging pentapeptide repairs the junction of epidermis and dermis, stimulates skin fibroblasts to rebuild extracellular matrix, and stimulates the synthesis of collagen I and IV, fibroblast protein, and mucopolysaccharide; the elasticity-promoting tetrapeptide promotes the production of collagen and elastin, increasing skin elasticity and improving skin texture; the neurotransmitter inhibitory peptide blocks the nerves that transmit signals to muscles and inhibits surface muscle contraction	1-8%

PRODUCT NAME	ACTIVE INGREDIENT	FUNCTION	MECHANISM	DOSE
JTbiotech® Palmitoyl Tripeptide-1 Plus Palmitoyl Tetrapeptide-7 Solution	PALMITOYL TRIPEPTIDE-1, PALMITOYL TETRAPEPTIDE-7	Two peptides work together to repair damaged proteins, prevent the loss of elastin, and stimulate collagen to replenish the skin matrix, thereby reducing wrinkles and tightening the skin. Promotes long-term wrinkle removal, firming, and rejuvenation effects	Wrinkles are the result of skin aging and inadequate skin repair. This product is composed of an anti-glycosylation tetrapeptide and an anti-aging tripeptide. The anti-glycosylation tetrapeptide inhibits the glycosylation that disrupts the recognition of damaged proteins and slows down skin repair. The anti-aging tripeptide can modulate connective tissue reconstruction and generate more repair proteins by activating gene expression related to extracellular matrix renewal and cell proliferation	3-8%
<b>BRIGHTENING AND SKIN TONE BALANCING</b>				
JTbiotech® Lightening & Brightness Enhancing Peptide Solution	NONAPEPTIDE-1, 4-BUTYLRESORCINOL	Significantly reduces pigmentation, balances skin tone, and improves skin brightness	Tyrosine and tyrosinase undergo a series of reactions to form melanin. This formula contains two major ingredients targeting different interaction sites of melanin formation. The interaction process is reversible rather than destructive, safely and efficiently inhibiting the formation of melanin. Specifically, the major peptide ingredient competes with MSH (Melanocyte-Stimulating hormone) by binding with MC1-R receptors, making MSH unable to activate tyrosinase and form melanin. The second ingredient mimics the structure of tyrosine to deceptively bind with tyrosinase, which inhibits the activation of tyrosinase and further cuts off the path of melanin formation	1-8%
JTbiotech® Pigmentation, Acne, & Inflammation Reducing Peptide Solution	NONAPEPTIDE-1, POTASSIUM AZELOYL DIGLYCINATE	Fights against abnormal pigmentation such as chloasma, freckles, age spots, and black spots; removes acne, reduces inflammation and regulates sebaceous glands; balances skin tone	This formula selectively enters overly active melanocytes to reduce abnormal pigmentation. The major ingredient efficiently reduces acne, improves skin elasticity, regulates sebaceous glands, and reduces oil secretion. The other peptide ingredient competes with MSH (melanocyte-stimulating hormone) and reduces tyrosinase activity to efficiently inhibit melanin formation	1-8%

PRODUCT NAME	ACTIVE INGREDIENT	FUNCTION	MECHANISM	DOSE
<b>MUSCLE RELAXATION &amp; SKIN COMFORT</b>				
JTbiotech® Sensitive Skin Anti-Wrinkle & Elasticity Enhancing Peptide Solution	ACETYL DIPEPTIDE-1 CETYL ESTER, PALMITOYL TETRAPEPTIDE-8, PALMITOYL TETRAPEPTIDE-7, TRIPEPTIDE-1	Specifically formulated for sensitive skin. Anti-wrinkle and anti-aging; repairs damaged skin; increases skin elasticity and smoothness	Four peptides combine to support the daily skin care needs of sensitive skin. The first peptide effectively eliminates wrinkles and enhances skin elasticity/firmness through promoting the production of hyaluronic acid and collagen; the second peptide focuses on anti-oxidation/anti-aging and repairs skin damage; the third peptide effectively controls continuous vasodilation and removes redness and swelling; the fourth peptide improves lymphatic circulation and reduces the release of proinflammatory cytokines	1-8%
<b>ANTI-AGING EYE CARE</b>				
JTbiotech® Extensive Eye Care Peptide Solution	PALMITOYL TRIPEPTIDE-1, PALMITOYL TETRAPEPTIDE-7, PALMITOYL PENTAPEPTIDE-4, DIPEPTIDE DIAMINOBTYROYL BENZYLAMIDE DIACETATE, ACETYL TETRAPEPTIDE-5, ACETYL HEXAPEPTIDE-8	Removes crow's feet and wrinkles around the eyes, reduces edema, removes eye bags, improves skin elasticity and firmness, and repairs aging and damaged skin around the eyes	Four peptides work together to promote eye skin care. One peptide improves lymphatic circulation, inhibits angiotensin-converting enzyme, and eliminates eye bags and edema; the second peptide blocks nerves' signal transmission to muscles, inhibiting surface muscle contraction and instantly eliminating expression lines; the third peptide effectively improves skin texture, prevents the loss of elastin and collagen, and reduces fine lines around the eyes; the fourth peptide strongly repairs damaged and aging skin cells, and increases the thickness of the skin around the eyes	1-8%

PRODUCT NAME	ACTIVE INGREDIENT	FUNCTION	MECHANISM	DOSE
<b>HAIR GROWTH &amp; CARE</b>				
JTbiotech® Hair Growth & Care Essential Peptide Solution	Biotinoyl Tripeptide-1, ACETYL TETRAPEPTIDE-3, ACETYL HEXAPEPTIDE-1	Stabilizes hair follicles, promotes hair follicle cell proliferation and hair growth; increases hair melanin content and enhances hair glossiness	This formulation contains three peptides for hair growth and care. The first peptide improves hair follicle cell metabolism, delays the hair follicle cell's aging process, and reduces hair loss; the second peptide promotes cell proliferation and differentiation, stimulates hair growth, improves hair follicle structure, and repairs hair follicle cells; the third peptide stimulates melanin production and promotes melanin transfer from melanocytes to keratinocytes, thereby restoring hair color	1-8%
<b>EYELASH GROWTH</b>				
JTbiotech® Eyelash Promoter Peptide Solution	Myristoyl Pentapeptide-17, Biotinoyl Tripeptide-1, ACETYL TETRAPEPTIDE-3,	Enhances eyelash thickness and growth; improves glossiness; promotes the proliferation of hair follicle cells and stabilizes eyelash hair follicles	This formulation contains four peptides for eyelash growth and care. One peptide promotes eyelash growth by regulating keratin gene expression in the hair follicle; the second peptide repairs hair follicle cells, promotes cell proliferation and extracellular matrix synthesis, and delays hair follicle aging; the third peptide stabilizes hair follicles and reduces eyelash loss through promoting nutrient absorption and blood circulation; the fourth peptide reduces skin sensitivity and soothes the skin near the eyelash roots	1-8%