

Bibliography

- Berge U, Kristensen P, Rattan SI. Kinetin-induced differentiation of normal human keratinocytes undergoing aging in vitro. *Ann N Y Acad Sci.* 2006; 1067:332-336.
- Kimura T, Doi K. Depigmentation and rejuvenation effects of kinetin on the aged skin of hairless descendants of Mexican hairless dogs. *Rejuvenation Res.* 2004; 7: 32-39.
- Clark BF. Kinetin delays the onset of ageing characteristics in human fibroblasts. *Biochem Biophys Res Commun.* 1994; 15; 201: 665-672.
- Barciszewski J, Siboska GE, Pedersen BO, et al. Evidence for the presence of kinetin in DNA and cell extracts. *FEBS Lett.* 1996; 393: 197-200.
- Barciszewski J, Rattan SIS, Siboska Ge, et al. Kinetin- 45 years on. *Plant Sci.* 1999; 148: 37-45.
- West MID. The cellular and molecular biology of skin aging. *Arch Dermatol* 1994; 130: 87-95.
- Rattan SIS Clark BFC. Kinetin delays the onset of ageing characteristics in human fibroblasts. *Biochem Biophys Res Commun* 1994; 201: 665-672.
- Verbeke P, Siboska GE, Clark BFC, et al. Kinetin inhibits protein oxidation and glyoxidation in vitro. *Biochem Biophys Res Commun* 2000; 276: 1265-1270.
- Olsen A, Siboska GE, Clark BFC, et al. N6-furfuryladenine, kinetin, protects against Fenton reaction-mediated oxidative damage to DNA. *Biochem Biophys Res Commun* 1999; 265: 499-502.
- Morales, Nolan, Nelson, et al. Effect of replacement close of DHEA in men and women of advancing age, *J. Clin Endocrinol Metab* 1994; 78: 1360-1367.
- Majewska, Neuronal actions of DHEA: Possible roles in brain development, aging, memory, and effects. *Ann New York Acad Sci* 1995; 774: 11-120.
- Wolkowitz, Antidepressant and cognition-enhancing effects of DHEA in mayor depression. *Ann York Acad Sci* 1995; 774: 337-339.
- Yen, Morales, K Horram: Replacement of DHEA in aging men and women. *Ann New York Sci* 1995; 774: 128-142.
- Araneo, Dowell, Woods, et al. DHEA as an effective vaccine adjuvant in elderly humans. *Ann NY Acad Sci* 1995; 774: 232-248.

FACTOR *g* GROWTH

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ANTI-AGING FACIAL LOTION
with plant growth factors

Stimulates
cellular regeneration
of the skin



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FACTOR *g* GROWTH

ANTI-AGING FACIAL LOTION



Presentation: 50 ml · 1.7 Fl. oz
Directions: Apply by gently massaging morning and/or night.

Indications

Facial lotion to treat and prevent the signs of skin aging. Contains plant growth factors that effectively prevent the aging of skin cells. Hydrates the skin while reducing expression lines. Antioxidant effects. Suitable for all types of skin.

Properties

Growth factors are active ingredients that stimulate cellular regeneration of the skin, especially epidermal keratinocytes and dermal fibroblasts. They also stimulate the production of glycosaminoglycans, as well as collagen and elastin fibers. These are all proteins that are essential in maintaining the consistency and the elasticity of the skin.

Factor G contains growth factors that regulate the cellular activity and normalize intercellular communication. These factors **include Kinetin, Pelvetia Canaliculata Extract, and Gibberelic acid**. They exhibit antioxidant properties and delay the senescence of leaves in plants, having similar effects on human skin cells.

Kinetin treats and prevents aging, particularly facial wrinkles and expression lines without causing irritations, exfoliation, or increasing the skin's sensitivity to the sun. **Pelvetia Canaliculata Extract** stimulates the synthesis of the components of the extra-cellular matrix (Proteoglycans, Collagen and Elastin). It also protects against the aggressions of free radicals. **Gibberelic acid** acts as a hormonal growth regulator that stimulates and regulates the development of plants.

COMPOSITION: 0.50% Kinetin, 0.03 Pelvetia Canaliculata Extract, 0.0025 Gibberelic Acid.

INGREDIENTS: Aqua (Water), Caprylic/Capric Triglyceride, Hydrogenated Polydecene, Pentylene Glycol, Ceteth-20, Propylene Glycol, Cetyl Alcohol, Glyceryl Stearate, Hydrogenated Lecithin, Laureth-7, Kinetin, Carrageenan (Chondrus Crispus), Dimethicone, Pelvetia Canaliculata Extract, Lecithin, Polyacrylamide, Gibberelic Acid, Disodium EDTA, C13-14 Isoparaffin, Carbomer, Sodium Hydroxide, Xanthan Gum, Triethanolamine, Imidazolidinyl Urea, Phenoxyethanol, Methylparaben, Ethylparaben, Butylparaben, Propylparaben, Isobutylparaben, Parfum (Fragrance).

growth factors of plants (cytokinins)

Cytokinins are vegetable growth hormones. They are essential antioxidant growth factors that **delay the aging of vegetable cells in plants and have similar effects on human skin cells.**

- 1 Regenerates epidermal skin cells or keratinocytes.
- 2 Promotes fibroblast proliferation as well as collagen and elastin synthesis. Enhances hyaluronic acid synthesis.
- 3 Enhances repairing and healing process: surgical wounds (hypertrophic and keloid), abrasions, etc.

active ingredients

KINETIN (N6-FURFURYLADENINE)

Kinetin is a cytokinin, which is a plant growth factor. It is a compound that is found in nature such as in plants, animals, and human DNA.

It has been used for treating and preventing age-related symptoms such as fine lines, wrinkles, and hyperpigmentations without causing skin irritations, exfoliations, or increased sensitivity to the sun.

Benefits

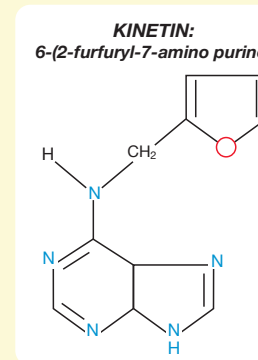
- Kinetin improves sun damage to the skin.
- Works without exfoliating or irritating the skin.
- Kinetin recovers the natural hydration barrier of the skin, conserving and smoothing it.
- Protects the skin from free radicals.
- Does not have side effects such as sensitivity to the sun, dryness, exfoliation, or itching.

Chemical Properties:

Kinetin is an amphoteric compound which is soluble in strong acids, alkalis, and glacial acetic acid, is slightly soluble in ethanol, butanol, acetone and ether, but is practically insoluble in distilled water.

Biological Properties

The anti-aging effects of Kinetin were originally discovered by scientists who revealed that kinetin is found in plant leaves. Other laboratory studies, using cultures of human cells, show that



kinetin delays fibroblast destruction.

Fibroblasts produce collagen and elastin, the two proteins most clearly tied to the development of wrinkles and sagging of the skin. Fibroblasts have been shown to decrease in number and vitality as the skin ages. The number of fibroblasts decreases at least 50% between birth and age 80. Kinetin delayed or prevented a range of cellular changes associated with the aging of human cells in vitro as well as changes in cellular morphology, growth rate, size, cytoskeletal organization, macromolecular synthetic activity and accumulation of pigments. Kinetin-treated old cells appeared to be younger under the microscope.

PELVETIA CANALICULATA EXTRACT

Description: A seaweed extract in which two cytokinins have been identified (Indole-3 acetic acid and benzylaminopurine).

Advantages: Effectively delays skin cell aging.

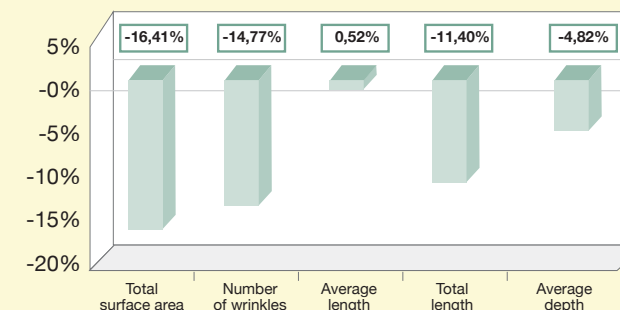
Inci name: Pelvetia Canaliculata Extract.

TEST IN VITRO:

- Cream with 1% Pelvetiane
- Dermatological Institute of Aquitaine
- Study period: 08/11/2001 to 12/27/2001
- Research Method: Apply directly on wrinkles for 4 consecutive days.
- Volunteers: 26 women with an average age of 57.3 years.

results

- **14.77%** reduction in the number of wrinkles.
- **16.41%** reduction in total facial wrinkle surface area.
- **11.40%** reduction in the overall wrinkle length.
- **4.82%** reduction in total wrinkle depth.



Volunteer n° 04

Before application:
 Number of wrinkles - 35
 Total length - 22.44 mm

After 42 days of application:

Number of wrinkles - 2
 Total length - 0.53 mm



Before



After 42 days

Volunteer n° 12

Before application:
 Number of wrinkles - 103
 Total length - 70.63 mm

After 42 days of application:

Number of wrinkles - 42
 Total length - 23.7 mm



Before



After 42 days

GIBBERELIC ACID

Description: A growth factor in plants.

Advantages: Accelerates regenerative processes of the skin and stimulates fibroblasts.

Inci name: Gibberelic Acid

Pelvetia Canaliculata Extract & Gibberelic Acid benefits

- Increases proteoglycan synthesis
- Increases collagen & elastin synthesis
- Increases cellular proliferation
- Reduces wrinkles