



## PeptAlde 4.0

### Naturally derived peptides that protect skin and hair against silent inflammation

Acute inflammation helps the body to heal and fight off infection. On the other hand, however, silent inflammation fights against healthy cells, causes disease, and accelerates the body's degeneration. The effects of this long process are almost invisible in young people – but it gradually creates deep damage to the skin and hair. PeptAlde 4.0 is clinically proven to counteract the effects of silent inflammation. It is characterized by four multifunctional peptides which discovery had been made possible by the cutting-edge digital technology of Artificial Intelligence (AI). With the help of a controlled enzymatic hydrolysis process, these peptides were specifically excised from organic rice proteins. PeptAlde 4.0 is scientifically proven to prevent dry skin, discomfort and loss of firmness, while soothing sensitive scalp prone to dandruff.

#### Product Description

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4 specific peptides, identified by Artificial Intelligence for their protection ability from silent inflammation, excised through a controlled enzymatic hydrolysis from organic rice (*Oryza sativa*).

#### Consumer Benefits

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Firming

Soothing / Sensitivity decrease

Redness reduction

Calming

Moisturization

Scalp Care



## In Vivo

Body moisturization

Body Firming

Reduction of scalp redness (shampoo application)

Maintenance of healthy sebum secretion and healthy scalp pH (shampoo application)

## In Vitro / In Tubo

Reduction of the release of the silent inflammation mediator TNF $\alpha$

Fibroblasts cell proliferation

Stimulation of involucrin and filaggrin synthesis

Stimulation of collagen I synthesis

Inhibition of elastase and MMP-12 (in tubo)

Hair repair (DSC)

## Clinical Study Results

Age of Volunteers: Volunteer panel >40, Volunteer panel >18

Results Time Scale: 1 week, 4 weeks, 2 weeks

Tested Skin Area: Belly, Legs, Scalp

## Scientific Concept

Artificial Intelligence

## Target Molecules in the Skin

Epidermis components

Horny layer components

Dermal extracellular matrix (ECM) components

Dermis components

Elastin

Collagen

## Nature of Active

Active Substance / Technology: Biotechnology, Protein (hydrolysate)

Compliance: Listed in IECIC

Geography: Asia

Origin: Vegan, Edible raw material basis

Special Formulation Features: Low pH tolerant, Cation compatible



## Preservatives

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Sodium Benzoate, Potassium Sorbate

## INCI

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Water (and) Hydrolyzed Rice Protein (and) Citric Acid

## Form of Delivery

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Liquid