



Cream EGF  
REGENERATION



**INCI:** Aqua, Cocos Nucifera Oil, Vitis Vinifera Seed Oil, PEG-6 Stearate, Dimethicone, Caprylic / Capric Triglyceride, Sodium Hyaluronate, Ceteth-20, PEG-18 Castor Oil Dioleate, PEG/PPG-4/12 Dimethicone, Carbomer, Steareth-20, Glyceryl Stearate, Potassium Sorbate, EDTA, BHT, Propylene Glycol, Triisopropanolamine, Pentaerythrityl Tetra-Di-T-Butyl Hydroxyhydrocinnamate, Tocopherol, Sh-Oligopeptide-1.

## Properties

The passage of time causes cells to age, decreasing the synthesis of many of those essential for maintaining youthful skin. As such, there is a reduction in the production of **hyaluronic acid** (HA), responsible for the level of tissue hydration, and **epidermal growth factor** (EGF), essential for epidermal regeneration, giving rise to dreaded skin ageing.

Over the years, **synthesis of hyaluronic acid** in the body reduces and degradation increases. The result is a loss of volume, a sagging facial contour and wrinkles, giving the face an old and tired appearance.

The **decrease in the amount of epidermal growth factor** in the body results in reduced cellular activation and therefore a decrease in collagen and elastin production. Consequently there is a loss of elasticity and firmness, and wrinkles and weak skin appear.

This is why we, at **Dermica Laboratoires**, have developed **EGF REGENERATION CREAM**, a new biotech cosmetic product formulated using **Hyaluronic Acid (HA)** and **Epidermal Growth Factor (EGF)**, which has proved highly effective in treating wrinkles and signs of ageing.

## HA

Also known as Sodium Hyaluronate, HA is a molecule (polysaccharide) that is naturally present in our body, in the epidermis and in different types of mucous membranes.

It acts as a component in the spaces between tissue cells and forms part of what is known as the extracellular matrix, or ECM, which facilitates the lubrication, absorption and transportation of basic nutrients to cells and the elimination of waste.

Hyaluronic acid is a glycosaminoglycan (GAG). GAGs may give rise to more complex and larger formations, making up large molecular structures such as proteoglycans.

Proteoglycans that are formed from or contain hyaluronic acid are normally found in the body's connective tissues, such as the skin and cartilage, as the main mechanism of action of hyaluronic acid chains is the absorption of water in order to maintain optimum levels of hydration in those tissues.

As such, HA molecules have a high ability to attract water molecules and, in turn, are able to expand and to withstand heavy compression.

As well as being an excellent skin moisturiser, hyaluronic acid has a number of other properties that make it unique:

- Skin hydration
- Firms and softens the skin (thanks to the lubrication of collagen fibres)

- Enhances and maintains the skin's defensive barrier (ability to impede movement of certain pathogens)
- Slows down skin ageing

### **EGF (Epidermal Growth Factor)**

**Epidermal Growth Factor (EGF)** plays a part in the majority of epithelial regeneration processes. It is a polypeptide consisting of 53 amino acids with a molecular weight of 6.2 Da, which has been shown to play an important role in epidermal development. It acts directly by stimulating the proliferation of epidermal cells without being subjected to any other influence or hormonal or systemic condition.



Estructura EGF

EGF Structure  
53 AMINO ACIDS  
6045 Da

Cells react to the presence of EGF because they have receptors that recognise it. Its presence initiates a cascade of molecular events that lead to an increase in cell division. Its presence determines the increase of keratinocytes and fibroblasts, which are responsible for producing the ground substance and the elastic, reticular and collagen fibres that make up the skin organ, and are essential in maintaining skin condition and in all regenerative processes.

This has been corroborated in numerous studies and has led to its use being tested in a whole range of conditions that produce epidermal damage and in techniques that produce skin lesions (physical and chemical peels, laser, pulsed light, radiofrequency...).

**Only a very low concentration of EGF is needed** to produce significant changes in cellular development that will produce the desired effects.

### **Properties of Epidermal Growth Factor:**

- Prevents and improves signs of ageing (wrinkles, age spots, loose skin...)
- Acts as a bio-revitaliser

**Uses**

- As it aids skin regeneration, it can be used in the process of wound healing
- Improves appearance of stretch marks
- Whenever there is a need for epidermal repair (after a peel, implants...)
- Following laser or IPL treatment
- Revitalisation. Restores skin vitality, improving cellular physiology
- Anti-ageing (reduces oxidative stress). *Improves cell function because of its antioxidant action*

<b>ACTIVE INGREDIENTS</b>	<b>FUNCTIONS</b>
Cocos Nucifera Oil	Antioxidant and regenerative properties. It creates a barrier that helps protect the skin from the effects of solar radiation.
Vitis Vinifera Seed Oil	High linoleic acid content. Astringent and regenerative properties that help keep the skin toned and firm, strengthening the cellular membrane. Skin conditioner. Emollient.
Sodium Hyaluronate	Hyaluronic Acid. Hydrating agent.
Tocopherol	Provides Vitamin E, antioxidant effect. Protects the skin from the sun's rays, helping keep it moisturised.
Sh-Oligopeptide-1	Epidermal growth factor.