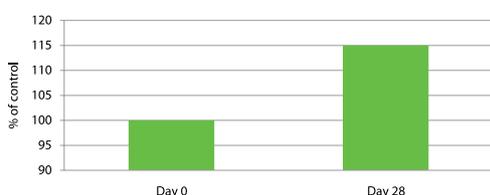


IUVACELL[®] PLUS

IuvaCell Plus is a product of a standardized isolation process delivering a high proportion of polyphenolic substances species-specific to *Epilobium* sp. As a result, this is an ingredient with potent antioxidant effects even at low concentrations, accompanied by many other biological effects that make the product ideal for use in anti-aging applications.

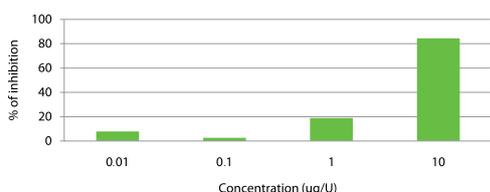
Increased hydration facilitated by influencing the dermal structure of the skin



Increase in skin water content after IuvaCell Plus treatment; Measured by MPA 580; Corneometry

Loss of hydration, which is characteristically lower in aging skin, changes the structure and mechanical properties of the skin. A drier epidermis triggers increased shedding, reduces skin elasticity and contributes to wrinkling. An in vivo study showed that IuvaCell Plus improves skin hydration by up to 15%, ensuring its correct functioning and youthful appearance.

Mechanisms of action



Inhibition of hyaluronidase by IuvaCell Plus

Water in the skin is bound to proteins and is essential for the normal functioning of enzymes.

Intercellular lipids and proteins are important in maintaining the content of water in the skin, as their loss contributes to dehydration. Chronic cellular stress caused by reactive oxygen species (ROS) is a major factor contributing to skin aging.

These ROS oxidize components of the skin, initiate inflammation, reduce production and increase the degradation of ECM elements. The antioxidant properties of IuvaCell Plus are used to reduce ROS levels, thus preventing oxidative damage to the ECM.

IuvaCell Plus also helps to protect the ECM by inhibiting the production of specific enzymes degrading the ECM (collagenase, hyaluronidase), while significantly increasing the gene expression of the main ECM components, elastin and collagen, as well as other intermediates and enzymes involved in the biosynthetic and metabolic pathways of lipids (e.g. sterols and fatty acids). This results in the general stimulation of extracellular matrix renewal; normalization of cellular synthesis processes leads to the correct organization of the dermal structure and the NMF.

IuvaCell Plus is beneficial in numerous respects for the stabilization and protection of the integrity of the ECM and lipids, which is reflected in improved hydration and protection against signs of aging in vivo.

All data were obtained in the relevant in-vivo and in-vitro measurements and, subject to registration, can be accessed at www.contipro.com/anti-aging

SPECIFICATION: IuvaCell® Plus– powder

Origin	aerial parts of Epilobium angustifolium L.
Appearance	dark brown powder
Loss of drying:	4,9%
Microbial contamination:	11750 CFU/g
Total polyphenolic amount:	5,8 mg/10 mg
Oenothein B	present
Preservative	none

* calc. on dry basis

SOURCE

- IuvaCell Plus is active ingredient of Epilobium angustifolium L. flowering herb (aerial parts) derived from an ethanol extract of Epilobium by separation of biologically inactive components
- non-GMO

SOLUBILITY

- fully soluble in butan-1,3-diol
- soluble in 80% ethanol

COMPATIBILITY AND PROCESSING

- sensitive to heat
- add to formulation under 40 °C

TOXICOLOGY

- non-irritating
- non-cytotoxic
- non-phototoxic



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