

induchem



UVAXINE®

POWER ON SKIN UV DEFENSE

Patented

SKIN AND SUN : FRIENDS OR ENEMIES ?

Sunlight is well known to be involved in the activation of many key biological processes in the skin, such as vitamin D synthesis.

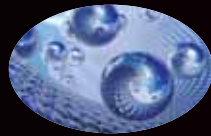
While sunlight is necessary, intensive UV irradiation leads to a high level of reactive oxygen species, DNA damages and induction of inflammatory responses.

UVAXINE® is a biotechnology designed active that activates skin natural cellular defenses against UV to take the best of sunlight while preventing skin aging.

UVAXINE®



CELL
DEFENSE
PATHWAYS
ACTIVATION



DNA
PROTECTION



NATURAL
UVA
SHIELD

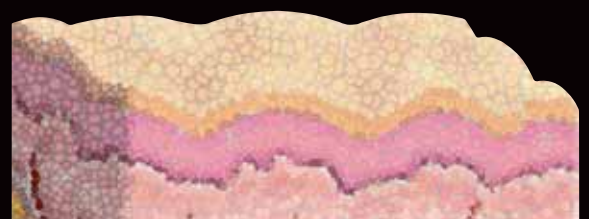
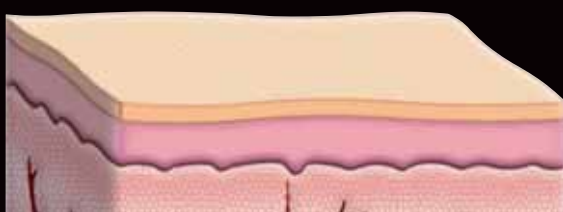


UVA AND UVB



PRE ACTIVATED CELLS
LOWER UV DAMAGES
EFFICIENT SKIN PROTECTION

UV DAMAGES
PREMATURE AGING



SOLEIL ET PEAU : AMIS OU ENNEMIS ?

La lumière du soleil est connue pour activer au niveau de la peau des procédés biologiques clefs pour notre santé, tel que la synthèse de la vitamine D.

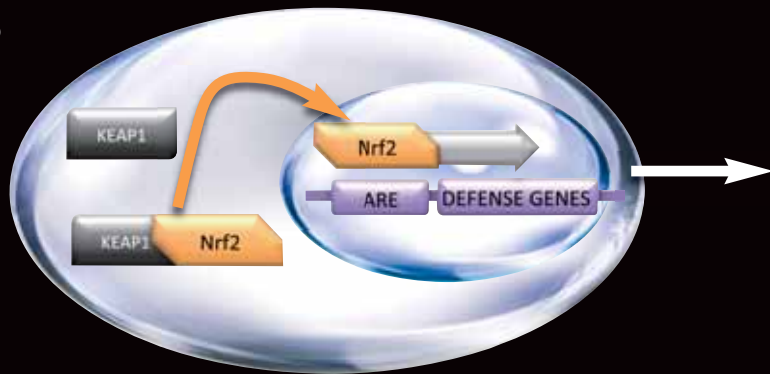
Si la lumière est nécessaire à notre équilibre, les rayonnements UV trop intenses induisent la formation de radicaux libres, la cassure de l'ADN et une réponse inflammatoire qui conduisent au vieillissement prématuré de la peau.

UVAXINE® est un actif issu de la recherche en biotechnologie qui active au niveau cellulaire les défenses naturelles de la peau contre les Uvs. UVAXINE® permet ainsi de bénéficier des bienfaits de la lumière tout en luttant contre le vieillissement prématuré.

WAKE UP CELL DEFENSE

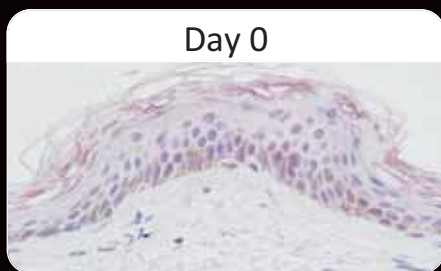
UVAXINE® activates Nrf2, the molecular switch for skin own defense

UVAXINE®

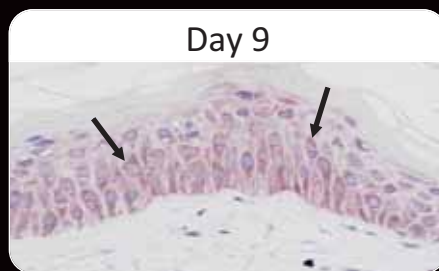


Production of :

- Detox enzymes
- Antioxidant proteins
- Protein chaperones



Day 0

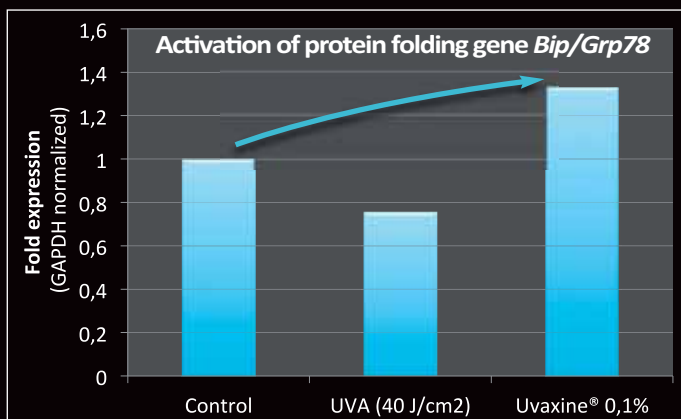


Day 9



Day 9 + UVAXINE® 2%

UVAXINE® activates the Unfolded Protein Response pathway in advance

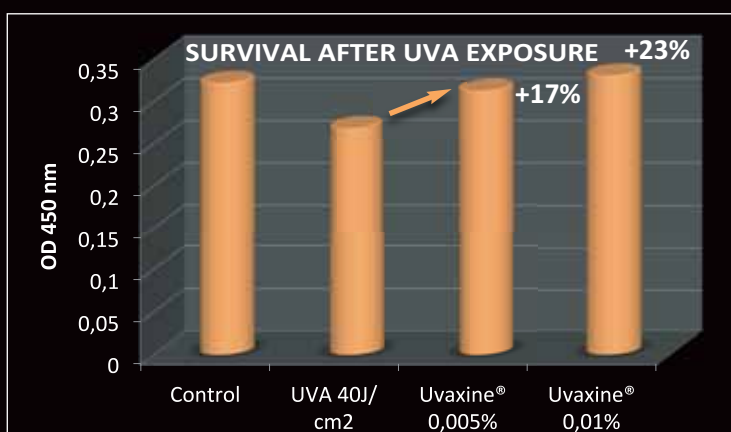


Fibroblasts extracted from a clinical human skin sample and incubated with UVAXINE® during 24h00. qRT-PCR quantification of the Bip/Grp78 gene.

Fibroblastes extraits d'un échantillon clinique de peau et cultivés en présence d'UVAXINE® pendant 24h00. Quantification par q-RT-PCR du taux d'expression du gène Bip/Grp78.

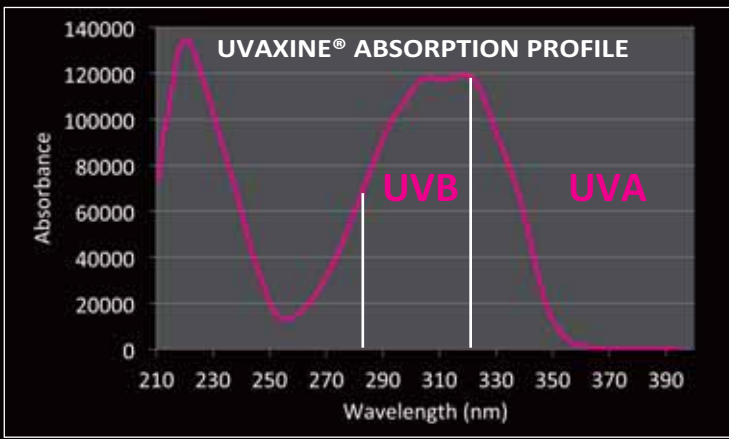
UVA PROTECTION

UVAXINE® protects skin fibroblasts from intensive UVA irradiation



Fibroblasts extracted from a clinical human skin sample of a 30 years old woman, and incubated with UVAXINE® during 24h00. Cells have then been exposed to a UVA irradiation (40J/cm2), and cultured again for 24h00.

Fibroblastes extraits d'un échantillon clinique de peau humaine (femme de 30 ans) et cultivés en présence d'UVAXINE® pendant 24h00. Ces cellules ont ensuite été exposées aux UVA (40 J/cm2) et cultivées durant 24H00 à nouveau.



UVA-UVB ABSORPTION SPECTRUM

While not being a sun filter, **UVAXINE®** shows a unique biological absorption profile of both UVB and UVA,

Molar extinction coefficient : $\epsilon_{320nm} = 47\,900\text{ M}^{-1}\text{cm}^{-1}$

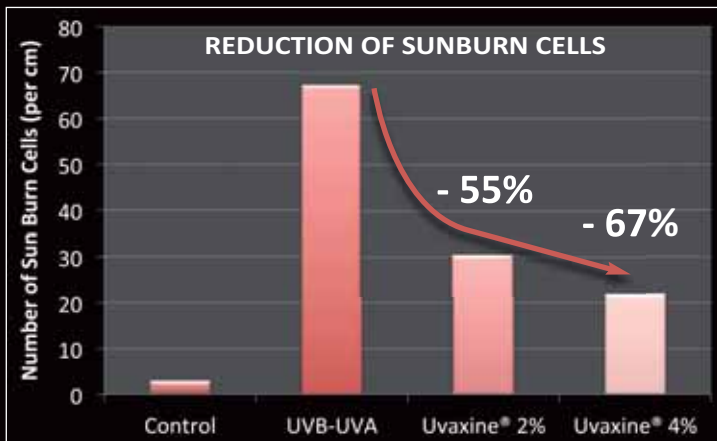
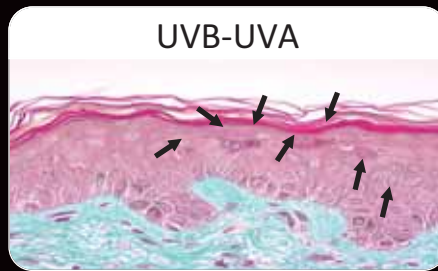
SPECTRE D'ABSORPTION UVA-UVB

Bien que n'étant pas un filtre solaire, **UVAXINE®** possède un spectre biologique unique d'absorption des rayons UVB et UVA.

Coeff. extinction molaire : $\epsilon_{320nm} = 47\,900\text{ M}^{-1}\text{cm}^{-1}$

IN SKIN EFFICIENCY

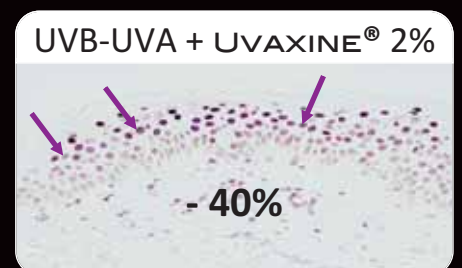
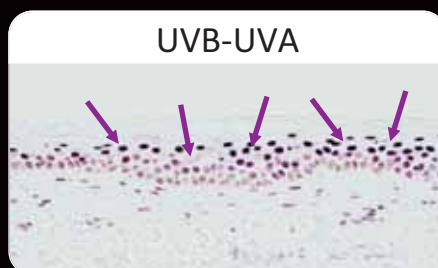
UVAXINE® reduces the number of sunburn cells under UVA+B



Clinical ex vivo evaluation on the skin of a 58 years old woman. Skin has been pre-treated with Uvaxine® during 4 days and exposed to UVA+B (9J/cm² +0,3J/cm²). Quantification of sunburn cells in the skin at day 6. Arrows : sunburn cells.

Evaluation clinique ex vivo sur explant de peau humaine (femme de 58 ans). Les explants ont été traités 4 jours avec Uvaxine® puis irradiés aux UVB+A (9J/cm² +0,3J/cm²). Quantification du nombre de cellules coup de soleil au jour 6. Flèches : cellules coup de soleil.

UVAXINE® lowers DNA damages (T-dimers) under UVA+B



Clinical ex vivo evaluation of thymine dimers in human skin. Arrows : location of thymine dimers in skin cells.

Evaluation clinique ex vivo des dimères de thymine dans la peau humaine. Flèches : localisation des dimères de thymine dans les cellules de la peau.

UVAXINE®

SWITCH ON SKIN INNATE DEFENSE AGAINST UV ACTIVATEUR DE LA DEFENSE NATIVE CONTRE LES UV

INCI NAME : GLYCERIN / POLYDATIN GLUCOSIDE

MANUFACTURER

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ACTIVE INGREDIENT

INNOVATIVE ANTI-AGING MECHANISM

- Activates the key Nrf-2 factor
- Activates gene Bip/Grp78 of protein folding
- Increases fibroblasts survival under UVA
- Reduces UVA+B skin damages

ORIGIN

UVAXINE® is a biotechnology active ingredient obtained by means of the enzymatic glycosylation of a natural plant stilbene (piceid), using a proprietary green chemistry process.

FORMULA

- Vegetal glycerin : 35-40% (w/v)
- Piceid- α -D-glucoside : 2.4 to 2.9%
- Water up to 100%

APPLICATIONS

- Active make-up
- Anti-aging products
- Eye contour
- Lips care
- Face contour
- Sun creams and lotions
- After sun care products

PACKAGING – FORMULATION

UVAXINE® is a liquid sterile water-glycerin solution containing ~25g/L of active ingredient.

SANS SOLVANT – SANS CONSERVATEUR

UVAXINE® can be incorporated in any cosmetic formula under liquid form at pH below 7.0

SUGGESTED RANGE OF USE

From 0.2% to 4% of the commercial solution.

FABRICANT

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INGREDIENT ACTIF

MODE D'ACTION INNOVANT

- Activation du facteur Nrf-2
- Activation générique du folding des protéines
- Protection des fibroblastes contre les UVA
- Diminution des dommages induits par les Uvs

ORIGINE

UVAXINE® est un actif biotechnologique obtenu par glycosylation enzymatique d'un stilbène naturel de plante (le piceid), grâce à un procédé de chimie verte breveté.

COMPOSITION

- Glycérine végétale : 35-40% (p/v)
- Piceid- α -D-glucoside : 2,4 à 2,9%
- Eau qsp 100%

APPLICATIONS

- Maquillage actif
- Soins anti-âge
- Produits contour des yeux
- Soins des lèvres
- Produit contour du visage
- Soins et lotions solaires
- Soins après-solaires

CONDITIONNEMENT - FORMULATION

UVAXINE® est un actif fourni en solution aqueuse stérile et concentrée à ~25g/L.

SANS SOLVANT – SANS CONSERVATEUR

UVAXINE® peut être introduit dans une formule sous forme liquide à pH inférieur à 7,0

DOSE RECOMMANDÉE

De 0,2% à 4% de la solution commerciale.

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