



Healthy aging

ANTI-POLLUTION  
ACTIVITY

ANTIOXIDANT  
ACTIVITY

CELL LIFESPAN  
PROTECTION

MATURE SKIN  
REJUVENATION

WRINKLE  
REDUCTION

# RESVERATROX<sup>®</sup>

Cosmetic active ingredient

Grapevine extract manufactured in France

## ACTIVE MOLECULES

Resveratrol and its derivatives  
Extracted from French vine shoots

**INCI name:** *Vitis vinifera* (grape) vine extract

## MULTIPLE POSSIBILITIES OF STANDARDIZATION

natural butylene glycol or  
propanediol or  
glycerin or  
inulin (powder form)



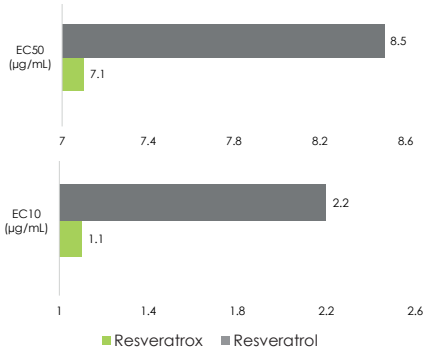
**Tested ingredient:** Natural RESVERATROX<sup>®</sup> (10% of monomers and oligomers of Resveratrol)

# HEALTHY AGING

## Antioxidant activity

### In-vitro

Effective concentration of RESVERATROX and Resveratrol on antioxidant activity



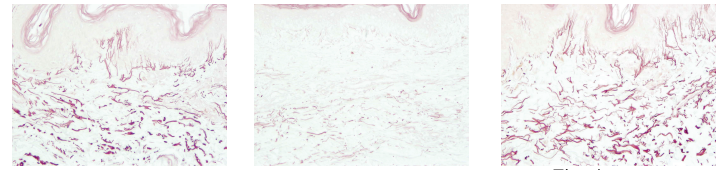
RESVERATROX® has a **stronger intracellular antioxidant effect** at lower doses than Resveratrol in keratinocytes

EC10: The lowest concentration to be effective  
EC50: Concentration to obtain 50% of maximum effect

## Anti-elastase activity

### Ex-vivo

Quantity of elastic fibers in dermis



Control  
17.3% of elastic fiber surface

Elastase  
2.9% of elastic fiber surface

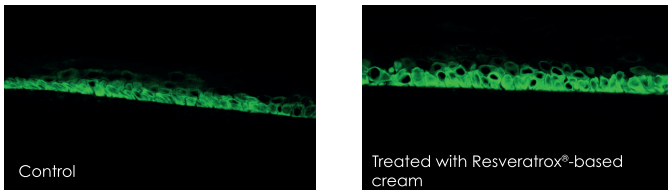
Elastase + RESVERATROX®  
15.7% of elastic fiber surface

RESVERATROX® **protects 89%\*\*** of elastic fibers in skin explant (27 years old woman)

**Tested dose: 0.2% of RESVERATROX®**

## Cell lifespan protection via SIRT1 activation

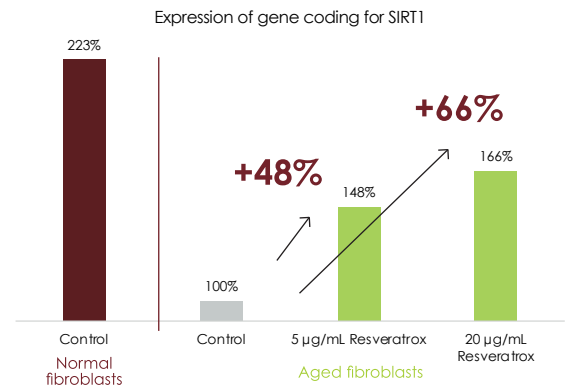
### Ex-vivo



Treatment with RESVERATROX®-based cream **increases SIRT1 expression by 55%\*\*** in reconstructed epidermis

**Tested dose: 1% of RESVERATROX®**

### In vitro



RESVERATROX® **restores** deficient SIRT1 expression due to age

## Wrinkle reduction

### Clinical study



Reduction of Crow's feet wrinkles area on average **-23%\*\***

The results showed:

**80%** of participants had positive results  
Reduction of number of wrinkles **by up to 70%**



Twice a day



49-69 years



20 participants



2 months

**Tested dose: 1% of RESVERATROX®**



Twice a day



40-55 years



20 participants



1 month

**Tested dose: 1% of RESVERATROX®**

## Mature skin rejuvenation

### Clinical study

Minimum epidermal thickness  
**+3.2µm\*\***

Number of dermal papillae  
**+33%\***

An application of a RESVERATROX® cream offers **skin strenghtening and a refining effect**

\*:p<0.05  
\*\*:p<0.01

# ANTI-POLLUTION

## Ex-vivo



Skin explant from a 64 years old woman



**Urban pollution:**  
Mixture of heavy metals +  
PAH (Polycyclic aromatic hydrocarbons)

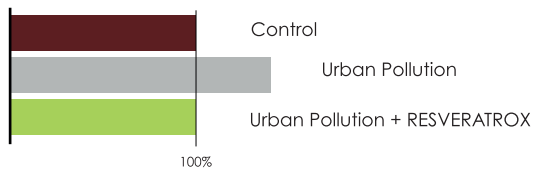


Exposed during 1.5h

**Tested dose: 0.2% of RESVERATROX<sup>®</sup>**

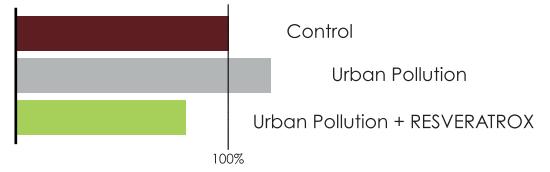
### Environmental contaminant receptor via AHR

Immunostaining of AHR in skin explants



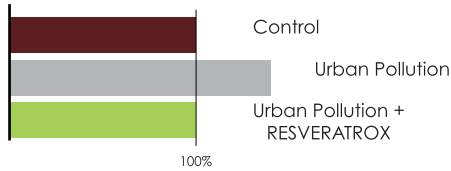
### Detoxification of heavy metals via MT-1H

Immunostaining of MT-1H in skin explants

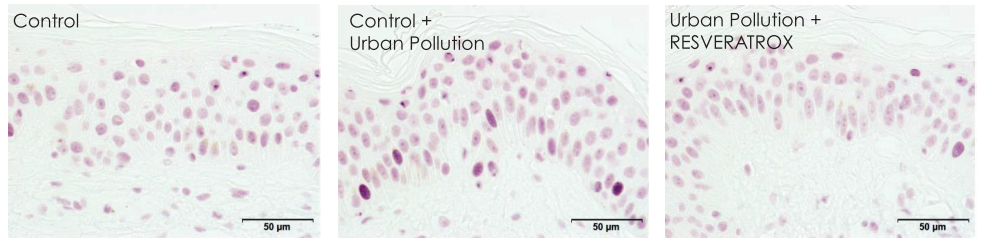


### Oxidative stress via Nrf2

Immunostaining of Nrf2 in skin explants



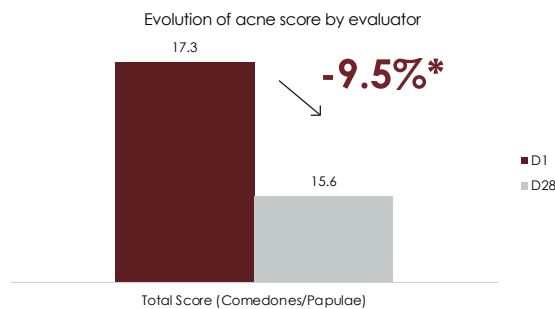
Immunostaining of Nrf2 in skin explants



RESVERATROX<sup>®</sup> inhibits the pollution with **results close to the control ones**

## Clinical study

### Overall improvement



Twice a day



20-44 years



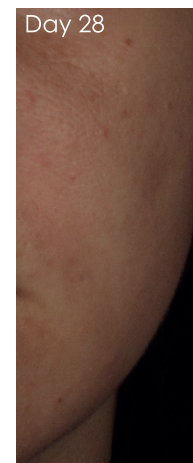
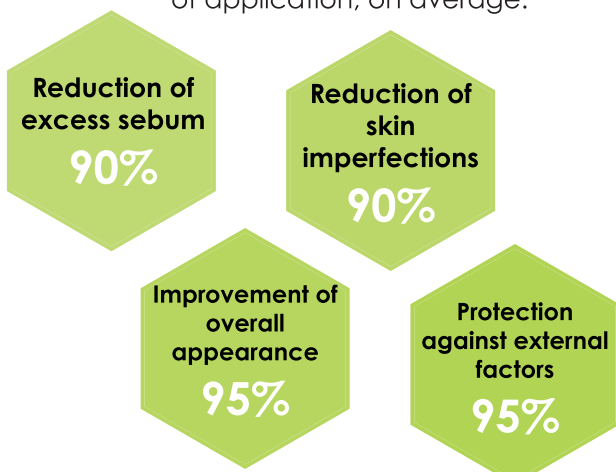
22 participants



1 month

**Tested dose: 0.6% of RESVERATROX<sup>®</sup>**

Self evaluation after one month of application, on average:



An application of a RESVERATROX<sup>®</sup> cream twice a day for one month offers **an overall improvement of skin appearance**

\*:p<0.05  
\*\*:p<0.01

## Actichem

Actichem is a French family company.

Since 1998, we have been developing and producing natural active ingredients from grapevine extracts standardized in Resveratrol monomers and oligomers for cosmetic markets. We have patented a unique extraction process of Resveratrol and its derivatives from vine.

Our values are based on **innovation and quality, driven by a family spirit** to give the **best service to our customers.**



## Sourcing

The raw materials used to produce our active ingredients are harvested exclusively in the famous French vineyards.

We use the **renewable** part of the grapevines - upcycled vine: vine shoots, pruned every year in winter.

We manage the harvesting and extraction stages. Manufacturing and control are carried out locally, allowing for real traceability and quality assurance.

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\***COSMOS approved ingredients:** Natural RESVERATROX, Natural RESVERATROX 2% Sol., Natural de-colored RESVERATROX 1% Sol. (Glycerin)

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