



# MICAH<sup>®</sup>

Revolutionary anti-aging technology

**"This is a long-awaited breakthrough."**

**Paolo Giacomoni, PhD,**

Biochemist, atomic physicist and former director of research at both Estée Lauder and L'Oréal

**HALLSTAR**   

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B E A U T Y

# MICAH®

Not a UV filter, not an antioxidant, Micah® is a revolutionary and safe way to stop the aging process in its tracks by blocking the formation of light-induced oxidative stress. Proactive, not reactive, Micah® prevents visible signs of aging: damage to the extracellular matrix, loss in skin elasticity and the creation of fine lines and wrinkles. Can your next product benefit from Micah®? Let's find out.

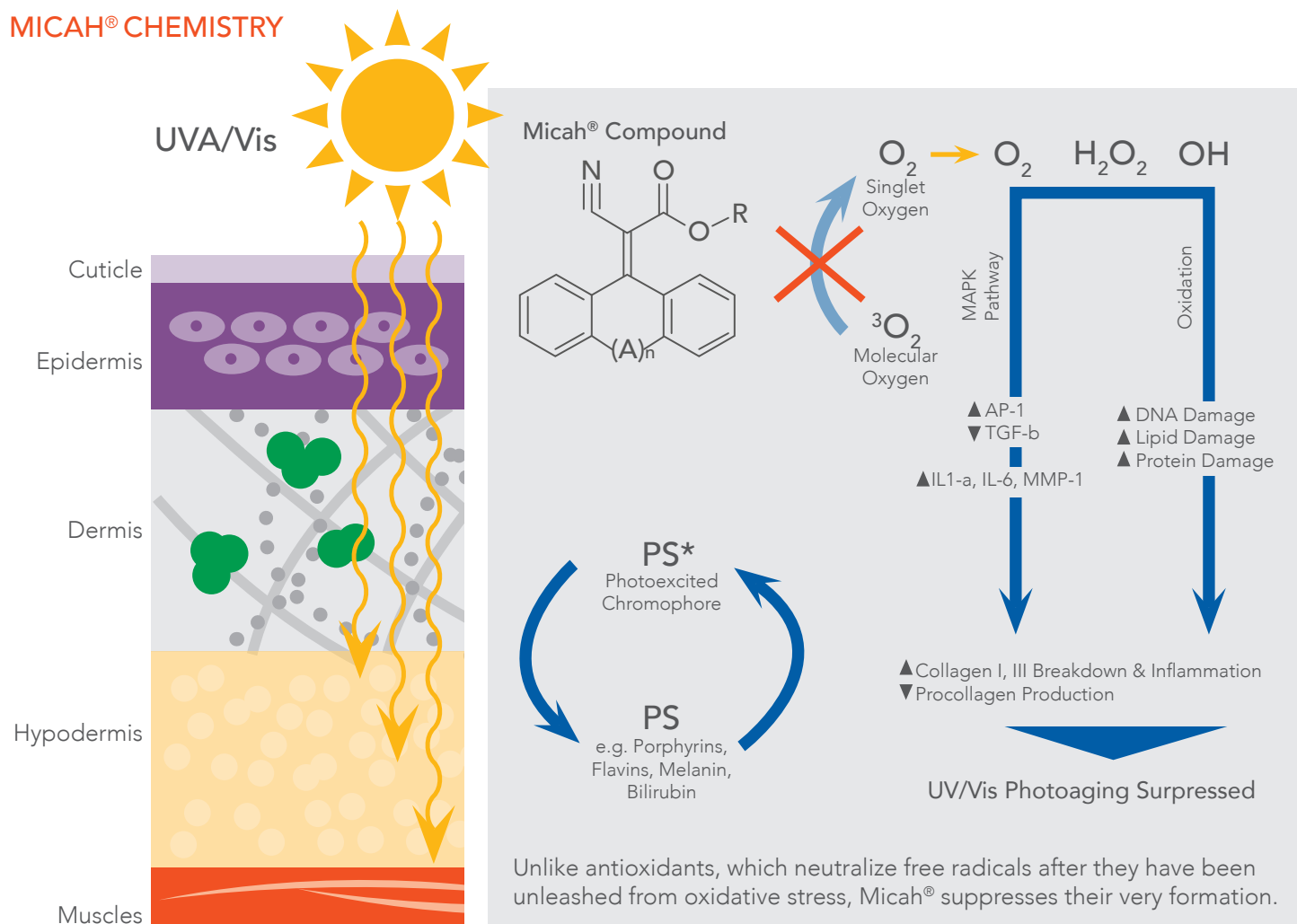
## VISIBLE SIGNS OF AGING: HALTED, NOT JUST HINDERED

We live in extraordinary times. The entire concept of aging is being challenged and transformed. And now, a new breakthrough in anti-aging science — Micah®.



- INCI: Bis(Cyano Butylacetate) Anthracenediylidene
- Protects against reactive oxygen species/free radicals in UVA-1 region (340-400nm)
- Extends protection to Visible Spectrum (>400nm), a potential source for significant ROS generation
- Provides broader spectrum FR prevention
- Colorless in formula
- Oxidatively and photo-stable
- Does not interfere with normal metabolism

## MICAH® CHEMISTRY



# MICAH® PROOF OF CONCEPT - STUDY 1, UVA LIGHT

## Study Objective

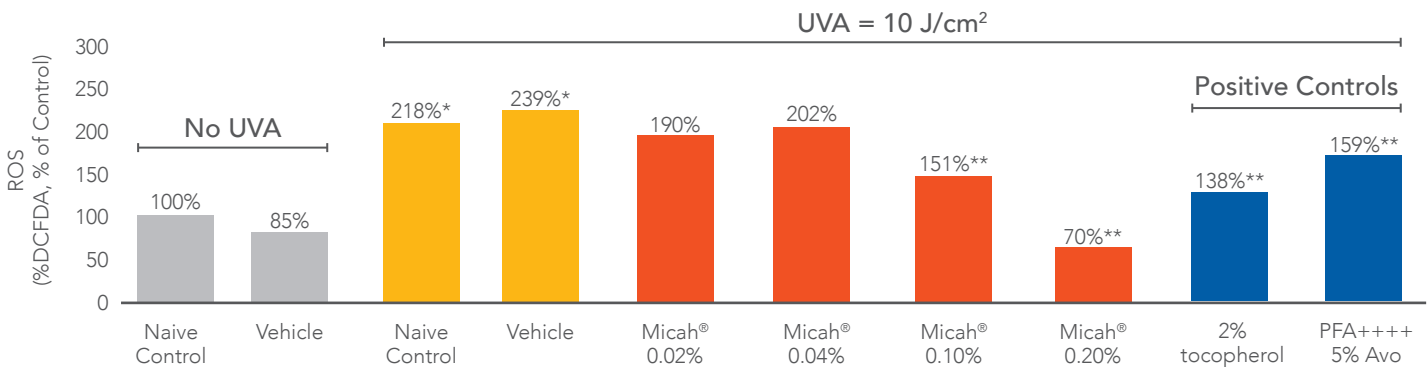
- Understand the impact of Micah® on UVA-induced ROS, inflammatory cytokines and DNA damage
- Study conducted at the Dead Sea & Arava Science Center at Ben Gurion University

## Study Protocol

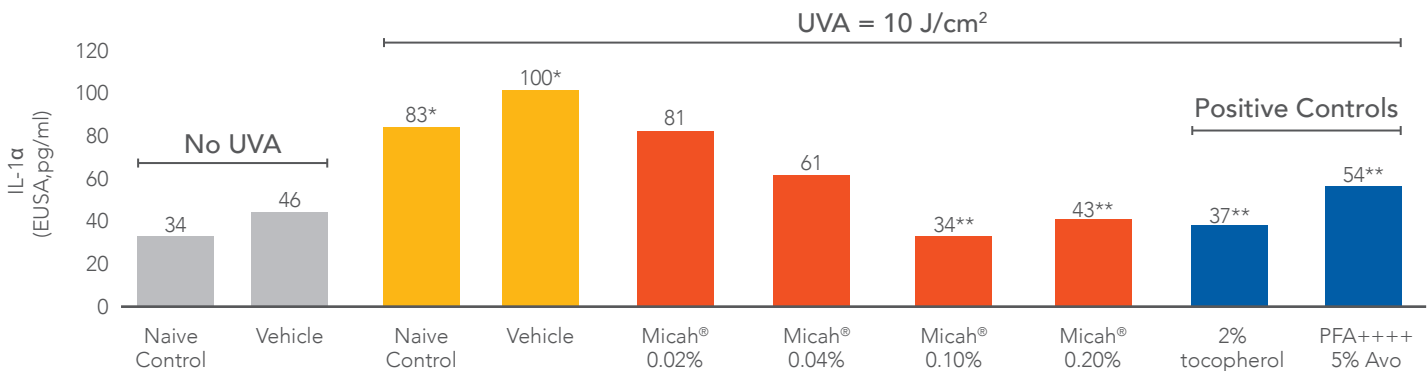
- Ex vivo human skin explants from female patients undergoing abdominal surgery (0.64 cm2)
- UVA: 320 – 400nm
- Micah® dose response: 0.02% to 0.20%
- Application amount: 2mg/cm2
- Application time – 30 minutes, n=3 in triplicate

## Micah® effectively prevented UVA-induced ROS at a use level of 0.20%

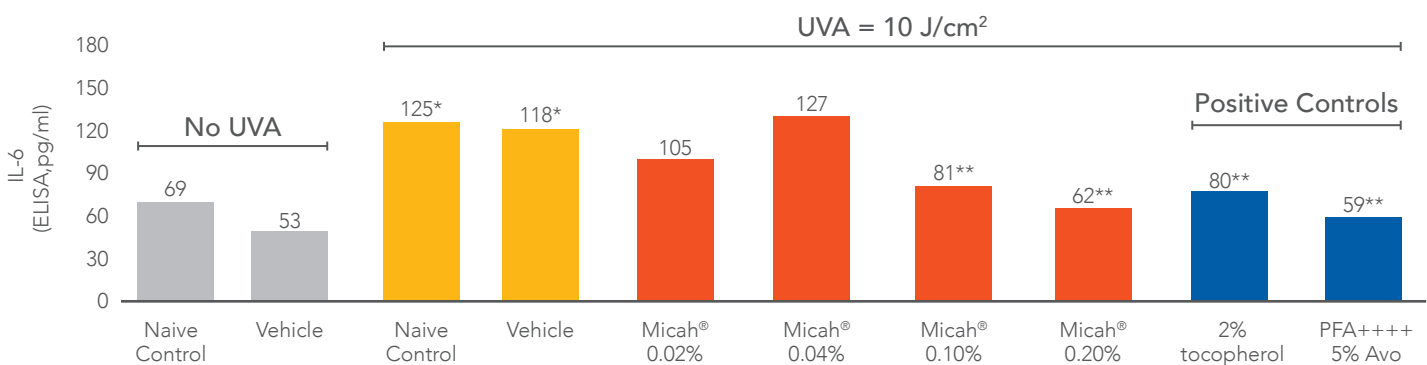
(performed at parity with the non-irradiated vehicle)



## At a use level between 0.10 and 0.20%, Micah® prevented secretion of IL-1α, a marker associated with skin inflammation, redness, irritation and skin barrier function

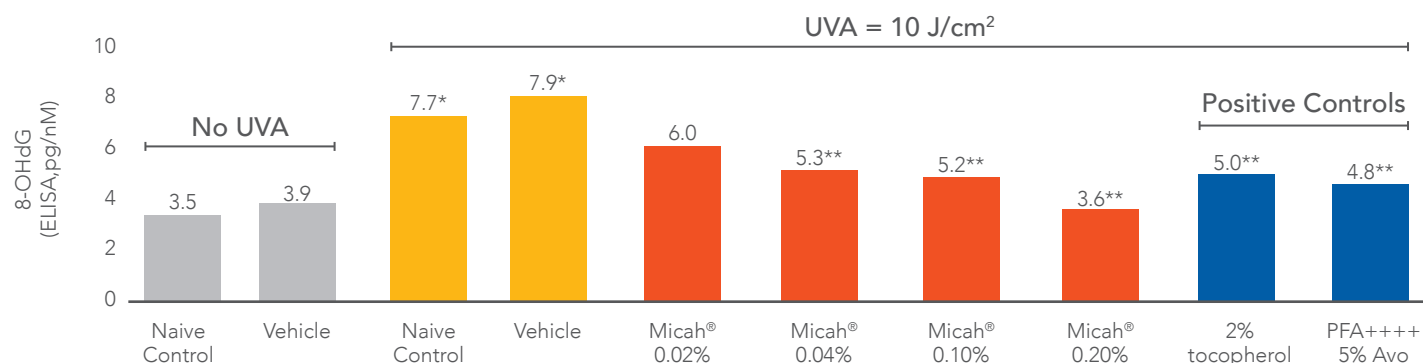


## At a use level of 0.20%, Micah® prevented secretion of IL-6, a marker associated with skin inflammation, redness, irritation and skin barrier function

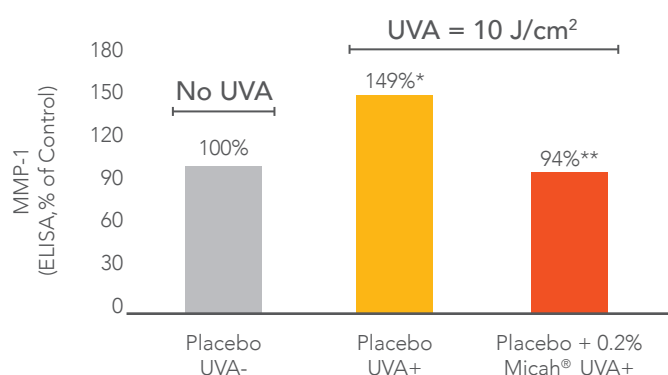


\* Significantly different from non-irradiated control  
\*\* Significantly different from irradiated control

At a use level of 0.20%, Micah® significantly reduced the presence of 8-OHdG, a marker associated with photoaged skin



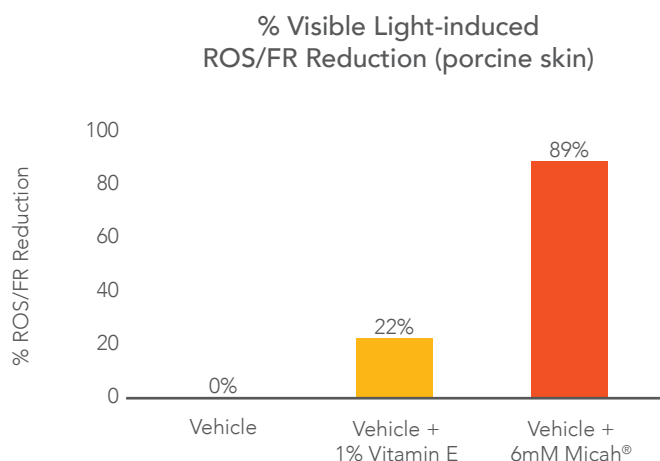
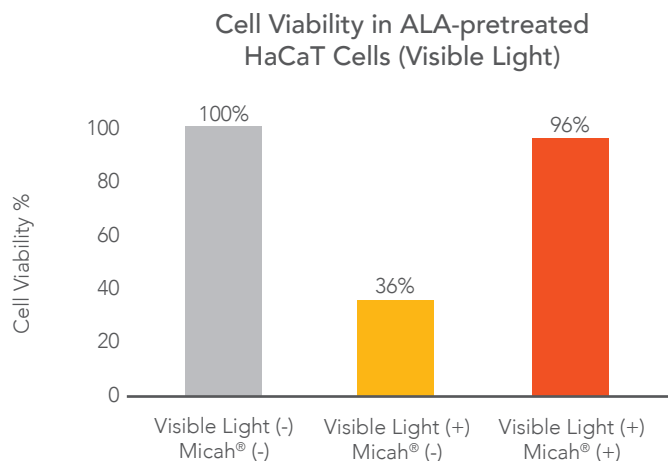
At a use level of 0.20%, Micah® demonstrated the ability to prevent the formation of MMP-1, an enzyme associated with the breakdown of the extracellular matrix (n = 4)



\* Significantly different from non-irradiated control

\*\* Significantly different from irradiated control

## MICAH® PROOF OF CONCEPT - STUDY 2, VISIBLE LIGHT



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