



**Provital**  
Do Care

# Circanblue™

Resynchronising the skin's  
natural biorhythm

- A biotechnological vegan solution to regulate the skin's circadian clock
- A postbiotic natural active with tested chrono-protective activity against blue light
- A repairing and detoxifying ingredient for integrated and healthy well-aging

**CareActives™**

Well-aging



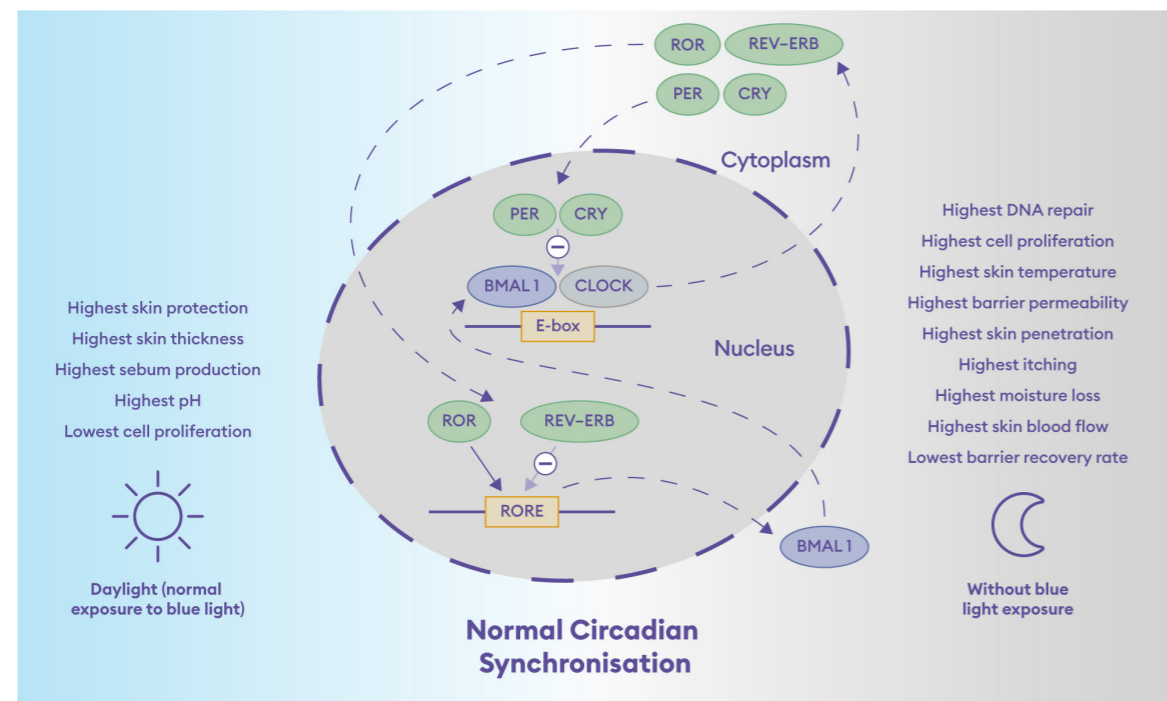
## The Great Reset

Crises can make people analyse and change their values. Over the past years, consumers took stock of their lives and are now actively trying to chart a new path forward.

This is what experts call the “Great Life Reset”, which could be defined as the drastic personal changes and a collective **reboot of values, lifestyles, and goals** triggered by a crisis. This **mental and physical desire to reset** will turn activities and products that positively impact mental and physical health, into factors that influence purchasing decisions.

## A brain on our skin

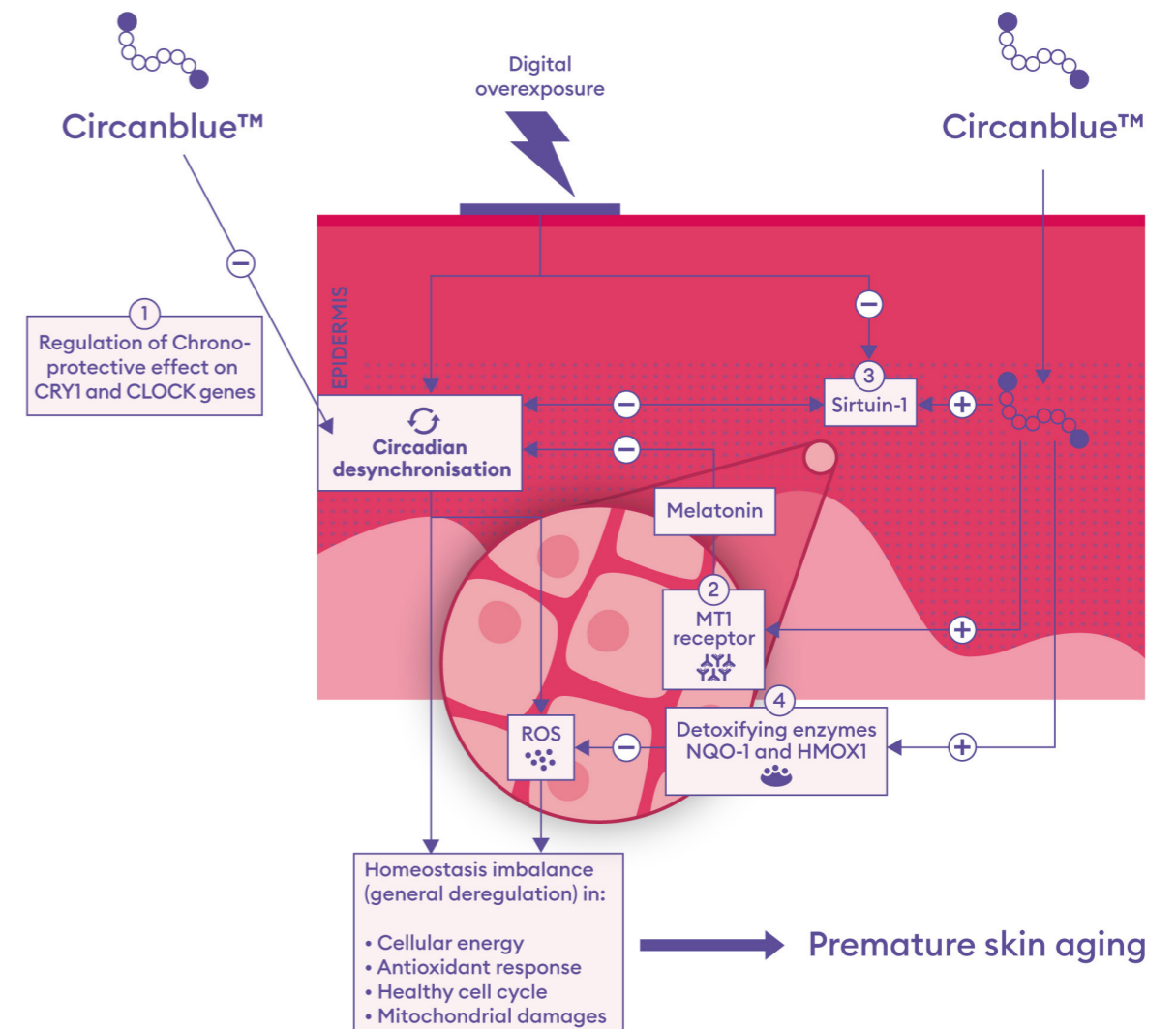
Recent studies show the presence of **peripheral circadian clocks in the epidermis**. This rhythm-generating molecular circuitry is mainly controlled by a network of feedback loops composed of activators and repressors **regulated by two key “clock genes”**: CLOCK and BMAL1.



## A biorhythm to resynchronise

Aging, seasons, variable sun exposure, fatigue, stress, insomnia, jet lag and **blue light from electronic devices during sleeping hours** are responsible for small variations in circadian biorhythms.

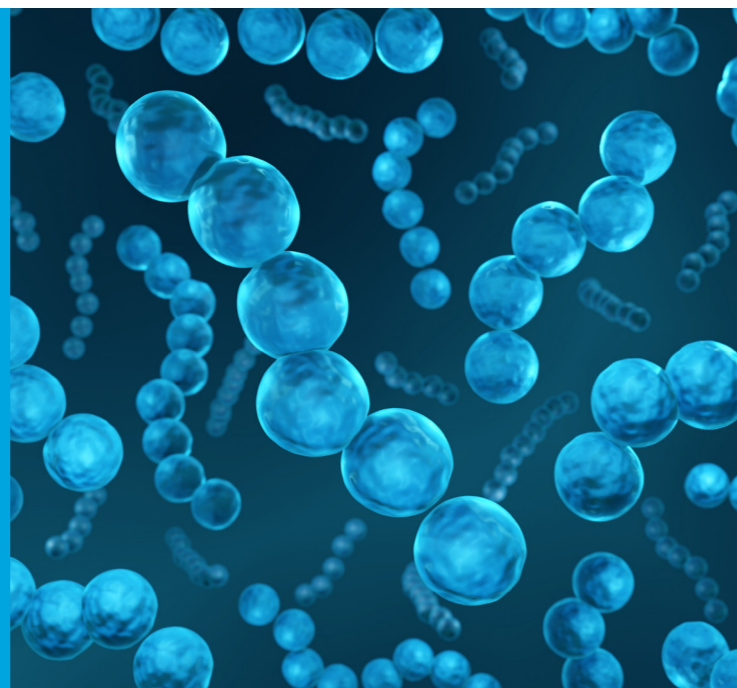
Since **alterations in our circadian biorhythm can affect our skin’s physiological metabolism**, leading to signs of skin fatigue and aging, Provital presents Circanblue™. A natural active ingredient that **truly ‘resets’** the paradigm of the effects of digital stress on the skin.



## “The greenest blue”

Circanblue™ is a bio-engineered cosmetic ingredient obtained via a plant-based fermentation of *Lactococcus lactis*. The resulting lab-grown lysate of this probiotic bacterium is both a vegan and a postbiotic active.

Provital has standardised its content of total proteins, and further analysed its resynchronising effects on the circadian cycle of skin previously altered by exposure to artificial blue light.

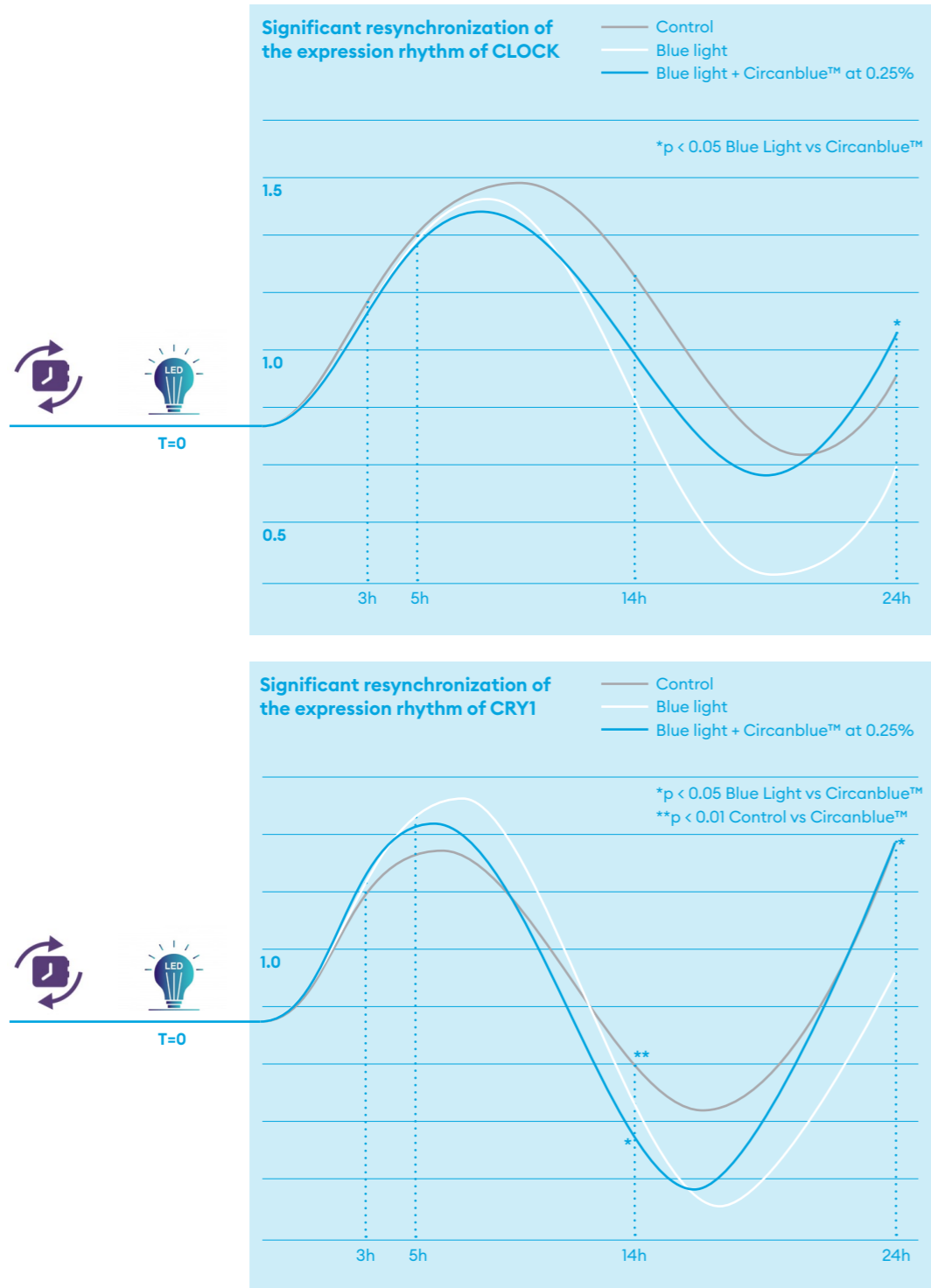


# Circanblue™ induces an epidermal resynchronisation for skin well-aging

## In vitro efficacy

### Chrono-protection against blue light

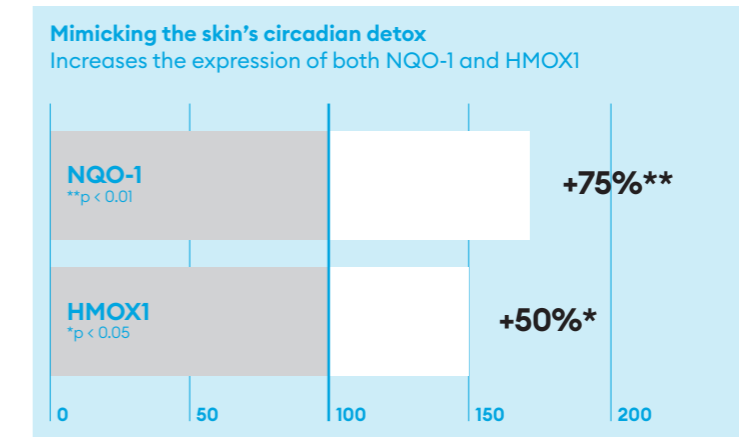
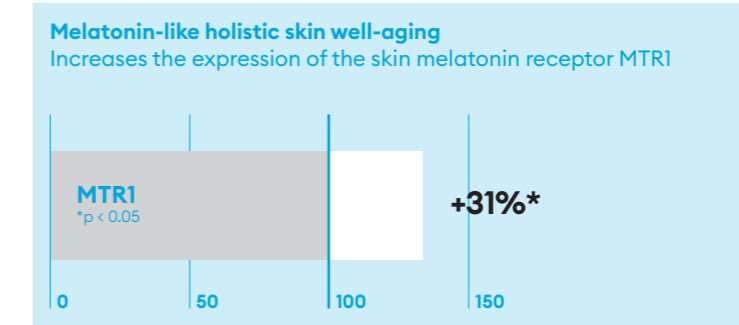
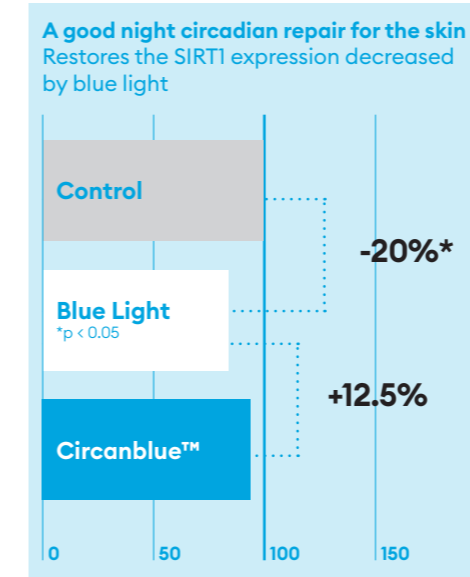
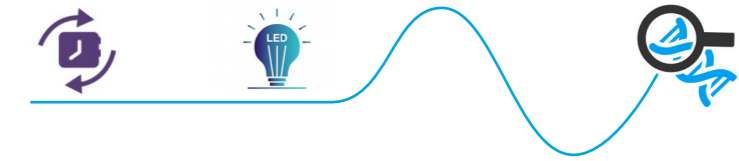
Human Primary Keratinocytes (HPK) are synchronised with dexamethasone – which stimulates the natural cortisol peak of the body’s circadian cycle – and afterwards, they are irradiated by blue light. This gene expression is measured and quantified by real-time qPCR for 24 hours after the blue light irradiation at different time points.



## In vitro efficacy

### Circadian Repair & Detox

Human Primary Keratinocytes (HPK) are synchronised with dexamethasone – which stimulates the natural cortisol peak of the body’s circadian cycle – and afterwards, they are irradiated by blue light. This gene expression is measured and quantified by real-time qPCR at the end of the study.



**Circanblue™ resynchronizes the biological rhythm altered by excessive blue light exposure**

**Just like a good night sleep, Circanblue™ significantly improves several repairing and detoxifying systems of our skin**

# Circanblue™, inducing the resynchronisation of the skin's biological rhythms for integrated & healthy well-aging

## Marketing tools

*At Provital, we care by inspiring and co-creating with our partners. For this reason, we provide you with a set of ideas to add even more value to your projects with Circanblue™.*



### 1. Capitalise on the new anti-blue light approach of this postbiotic ingredient to fill the competitive GAP this category has on innovative claims

Tap into the undesired “digital overdose” that consumers feel with their current lifestyles by using new biological targets on the skin that make consumers feel safe and in sync with nature’s rhythms.

**A product with Circanblue™ can claim its own disruptive technical solution to a digitally induced desynchronisation of the circadian cycle, which will translate into a great appealing story against the stress that such a digital overexposure represents for the skin.**



### 2. Emphasize the many benefits of nature-equivalent lab-grown materials to capitalise on that innovative type of ingredient

By focusing on ingredient education, your product story will find the balance of efficacy claims, ingredient sourcing, and the skin-wellness connection that the consumer is looking for.

**Thanks to its innovative tested efficacy as a blue-light reverser on the skin, and its vegan and postbiotic origin, Circanblue™ brings the right tools to the table for an understandable - and yet, never heard of - ingredient story.**



### 3. Help consumers get a restful night's sleep and induce calmness with more than brand communication

Experiment with packaging, accessories and even with oral supplements to convey skincare credentials in new and unexpected ways and explore the use of holistic wellness to elevate product application and skincare rituals.

**Since engaged facial skincare consumers are looking for new ways to apply products and maximise results, with Circanblue™ in a product line that includes, for example, a nutraceutical complement to it, you will connect with those consumers on a deeper level.**



### 4. Use sleep hygiene to explore the most emotive side of facial skincare

In today's agitated world, consumers crave comfort and love. So, brands need to be considerate of how facial skincare can make consumers feel and explore how relaxing emotions on skincare can affect consumer's purchase decisions.

**Products with Circanblue™, which empower these ‘Self-love Seekers’ to be the best they can be - through good sleep hygiene habits and tested effects - will drive their purchase decisions and loyalty.**

Listen to this  at Provitalks!





## Specifications

**CIRCANBLUE™ 71220 Properties** Postbiotic natural active ingredient with tested chrono-protective and anti-blue light activities that lead to a healthy resynchronisation of the skin's circadian cycle for an integrated skin well-aging.

**Active molecules** Standardised in total proteins.

**Appearance** Transparent.

**Solubility** Soluble in aqueous solutions.

**Recommended dose** 1-3%

**INCI** Water, Glycerin, Lactococcus Ferment Lysate, Pentylene glycol, Levulinic acid, Xanthan gum, Glyceryl Caprylate

### Certification



COSMOS  
APPROVED

### Compliance



**100% Natural Origin**  
(ISO16128)

## Formulation

**MIDNIGHT BLISS**  
Resynchronising night cream

| INCI/ PCPC   | (W/W)                                  |
|--|--|
| <b>A</b> Aqua (Water)<br>Carbomer  | 62.70<br>0.15                          |
| <b>B</b> 1,3-Propanediol<br>Glycerin<br>Acacia Senegal Gum and Xanthan Gum   | 5.00<br>3.00<br>0.40                   |
| <b>C</b> Velvet touch Oil<br>Tricaprylin<br>C13-15 Alkane, Polyglyceryl-6 Oleate<br>Cetearyl Alcohol (and)<br>Cetearyl Glucoside<br>CI 60725                     | 4.00<br>6.00<br>10.00<br>4.00<br>0.001 |
| <b>D</b> CIRCANBLUE™<br>Bilberry Extract GBNB<br>Phenylpropanol (and) Propanediol<br>(and) Caprylyl Glycol (and) Tocopherol<br>Magnolia Officinalis Bark Extract | 2.00<br>1.00<br>0.80<br>0.20           |
| <b>E</b> Tocopherol<br>Citrus Aurantium Amara<br>(Bitter Orange) Flower Oil  | 0.50<br>0.10                           |
| <b>F</b> Water, Sodium Hydroxide   | 0.15                                   |

