

Lapagyl™

advanced botanical ingredient

Let your youth blossom

The tree of life for skin longevity

Preventing telomere shortening and senescence

Skin that looks better for longer

Oil-based extract of lapacho bark, known as the tree of life, that helps prevent telomere shortening and cellular senescence *in vitro*. The ingredient aims to promote a slower skin aging process and an increased skin longevity for a more radiant, younger and better-looking appearance.

APPEARANCE: Clear to slightly hazy liquid containing 10% Tabebuia Impetiginosa Bark Extract.

INGREDIENT NAME: Brassica Campestris (Rapeseed) Seed Oil, Tabebuia Impetiginosa Bark Extract, Polyglyceryl-3 Diisostearate.

USE LEVEL: 2-3% **SOLUBILITY:** Oil soluble.

SUSTAINABILITY: Eco-extraction technology:

- Low water consumption
- Short process
- Low energy consumption
- Use of natural solvents
- Pollution prevention
- No undesired reactions



Naturality according to ISO 16128
100% natural origin content

You know the destination
WE'LL HELP YOU REACH IT SUSTAINABLY

SCIENCE

Telomeres consist of repetitive nucleotide sequences at the end of chromosomes that act as caps to protect the genetic data. With each cell division, telomeres become shorter, leading to a loss in chromosome protection and eventually, to cellular senescence. By adding telomere repeats to the end of chromosomes, the telomerase enzyme complex is key to counteract telomere shortening. However, aging causes telomerase to become less active, causing cells to become senescent. Senescent cells develop characteristic morphological changes, such as a decline in lamin B1, which is an essential factor in DNA replication and repair.

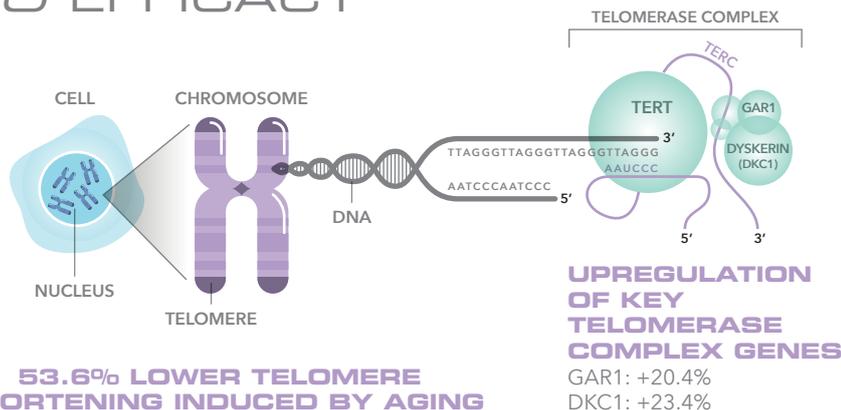
Lapagyl™ advanced botanical ingredient showed *in vitro* to upregulate key telomerase complex genes and to prevent telomere shortening, while also delaying cellular senescence. When applied on the skin of volunteers, it showed to minimize the appearance of wrinkles, improved skin radiance and moisturization and enhanced skin firmness of the upper eyelid for a youthful and better overall look.



IN VITRO EFFICACY

DELAYED CELLULAR SENESCENCE

Significant recovery of the age-induced loss of lamin B1.



Preventing telomere shortening and cellular senescence *in vitro*

IN VIVO EFFICACY

1. YOUTHFUL AND BEAUTIFUL APPEARANCE

30 women applied a cream with 3% Lapagyl™ advanced botanical ingredient on half face and a placebo cream on the other half, twice a day for 28 days.

- Minimized appearance of wrinkles**

Assessed through real 3D microtopography imaging system based on fringe projection.



More youthful skin complexion

-21.6% crow's feet wrinkle depth

- Skin radiance**

Evaluated through the gloss parameter by means of a spectrophotometer.



More glowing skin at the end of the treatment

- Moisturization**

Obtained through corneometry on the cheek.

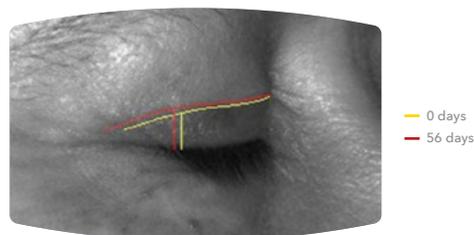
2. MINIMIZED DROOPY EYELID

33 women applied a cream with 2% Lapagyl™ advanced botanical ingredient around one eye and a placebo cream on the other eye, twice a day for 56 days.

- Skin firmness of the upper eyelid**

Assessed by means of cutometry.

A vertical line was drawn from the end of the upper eyelid to the eyelid fold, and before and after images were superimposed.



17.9% improved skin moisture, which is lost with age

Firmer upper eyelid for a better look

Improved skin firmness of the upper eyelid by 7.6%

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