

# NUCLEOLYS

DNA PROTECTOR



GLOBAL ANTI-AGEING

NUCLEOLYS

PHYTOBIOACTIVE

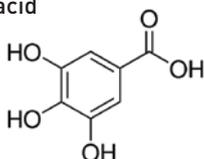
BIOTECHNOLOGY

## > ACTIONS

- Anti-free radicals
- DNA protector
- Prevents skin damage
- Delays the effects of ageing

## COMPOSITION

**Phenolic compounds:**  
Oligo-proanthocyanidines  
Gallic acid



## ORIGIN

Obtained by **biotechnology**, from an Argentinian tree: the white quebracho, *Aspidosperma quebracho*.

NUCLEOLYS consists of proanthocyanidol (condensed tannin) oligomers, bio-purified by the action of specific micro-organisms that concentrate the product. It is used in bio-polymers (liposomes) to prevent formulation colouring.



## > MECHANISM OF ACTION

NUCLEOLYS is a unique active ingredient. It protects the DNA of the skin cells from free radicals and UV aggressions. NUCLEOLYS also restores DNA self-repair capabilities.

## > COSMETIC BENEFITS

- The skin is protected from environmental aggressions and from damages caused by UV radiation, it recovers its regenerative capabilities.
- NUCLEOLYS limits signs of photo-ageing and preserves the skin youthful appearance.

## > COSMETIC APPLICATIONS

- ▶ **Protective care products**
- ▶ **Anti-wrinkle and anti-ageing care products**
- ▶ **Sun care and after-sun products**
- ▶ **Regenerative care products**

## > SCIENTIFIC PROCESS

### • Free radicals

Free radicals are responsible for tissue damages: they destroy membrane proteins and lipids, they attack DNA and degrade hyaluronic acid, a fundamental component of the dermis. Their formation, and hence skin cell ageing, is promoted by many environmental factors. Free radicals scavengers help prevent this deterioration.

### • Condensed tannins

Proanthocyanidols are flavonic polymers; they form complexes with collagen fibres, thus protecting the underlying layers. They trap free radicals, thus inhibiting lipid peroxidation.

NUCLEOLYS is a unique plant-derived active substance, perfectly stabilised by micro-encapsulation. It protects cellular DNA, possesses anti-elastase and antioxidant activities and restores the ability of DNA to self-repair.

