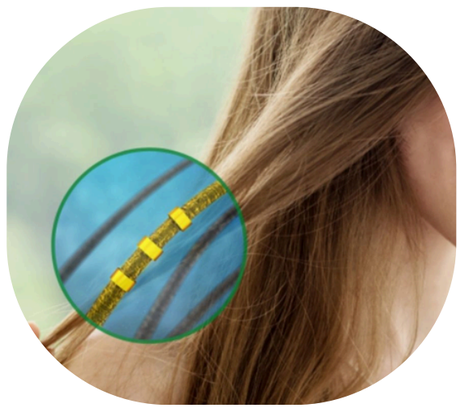
Anti-frizz and hair structure protection.

PROTECSYL

COBIOSA
NATURALLY EFFECTIVE

PROTECSYL is an extract of *Jatropha macrantha*, a plant native to Peru and renowned for its medicinal properties. It contains high levels of proanthocyanidins, as well as proteins, sugars and phytosterols, among other compounds.

This active ingredient is designed to **protect the hair's internal architecture and prevent protein degradation.** It preserves the cell membrane complex (CMC), helping to improve hair strength and elasticity while restoring weak and brittle hair.



Approved by ECOCERT RAW MATERIAL
COSMOS APPROVED

GARANTIA HALAL DE JUNTA ISLAMICA
IH-786/2.1/M/42

NATURAL ORIGIN CONTENT 100% ISO 16128

INCI

Plukenetia Volubilis Seed Oil, Salvia Hispanica Seed Oil

DOSE OF USE

1-5%

SOLUBILITY

Hydrosoluble

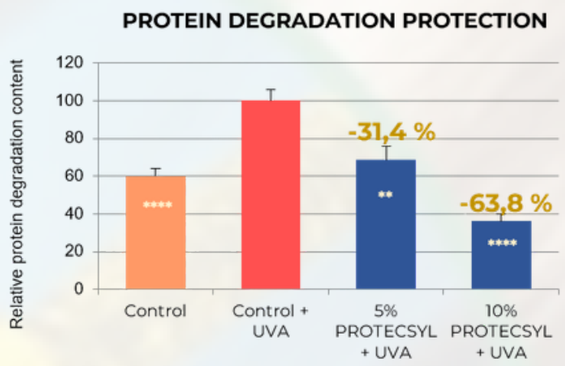
EFFICACY TESTS

EX VIVO

5/10% PROTECSYL | Dark Caucasian hair locks | PROTECSYL + UVA

PROTEIN PROTECTION

- Application of PROTECSYL
- UVA irradiation (11 J/cm²)
- Quantification of proteins and peptides using the Bradford colorimetric assay.



. **p value < 0.01. **** p value < 0.0001.

PROTECSYL demonstrates **a protective effect against UV-induced protein degradation.**

These results are associated with:

- ANTIOXIDANT: 98% inhibition of oxidation.
- ANTI-LIPID PEROXIDATION: 70% inhibition of lipid peroxidation.

EX VIVO

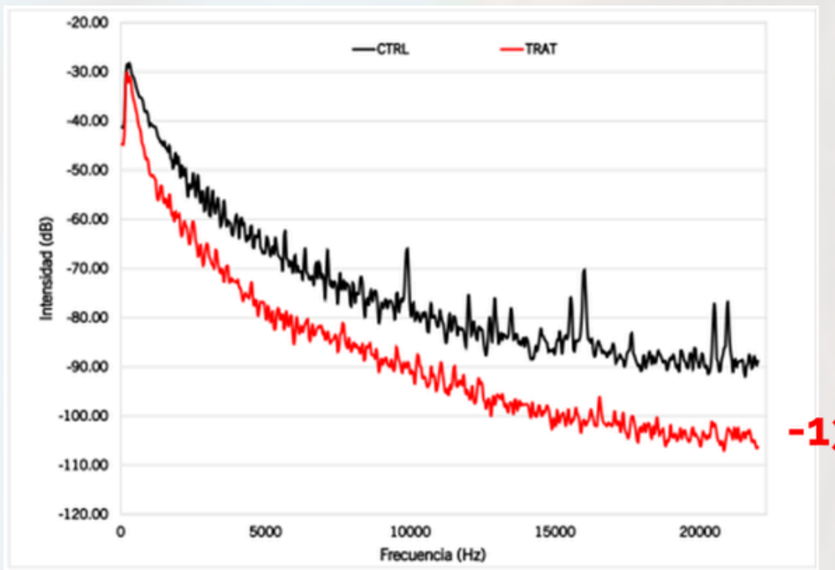
5/10% PROTECSYL | 6 Caucasian hair locks | 3 measurements per lock

ANTI-FRIZZ

SOUND-BASED EVALUATION OF HAIR FRICTION:

A device equipped with electronic sensors (WIDI 4.50 Pro software) is used to translate the roughness of the hair fibres (measured through the friction generated on the sensor) into a melody.

The resulting audio file is converted into a text file using Audacity software, allowing intensity data (dB) to be obtained as a function of frequency (Hz) and the different treatments to be compared.

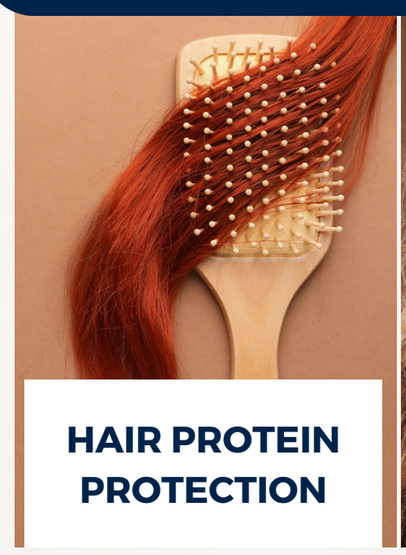


-13 db

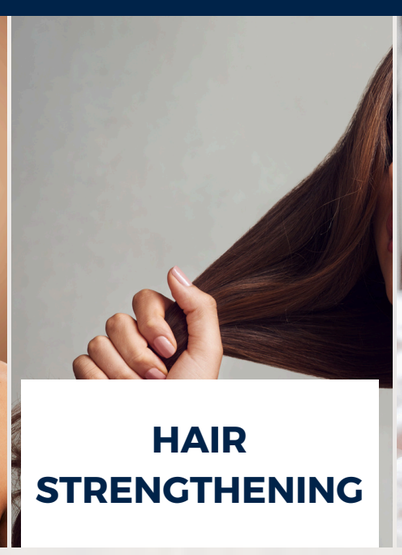
A reduction in friction is directly associated with increased smoothness and improved cuticle cohesion.

PROTECSYL reduces hair friction, which is associated with an **anti-frizz effect.**

Marketing claims

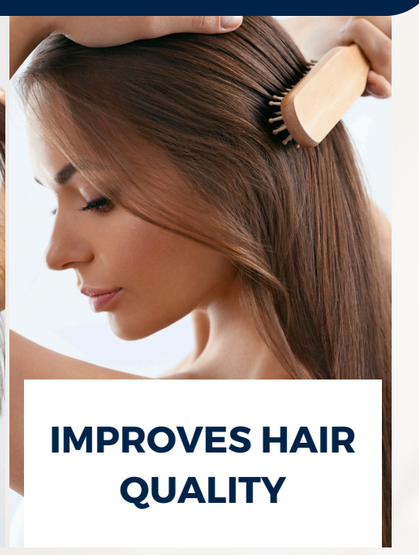

HAIR PROTEIN PROTECTION

ANTI-FRIZZ SPLIT-END REPAIR


HAIR STRENGTHENING

HAIR INNER ARCHITECTURE PRESERVATION

INCREASE HAIR COHESION


IMPROVES HAIR QUALITY