FILCORTEX VEG

REPLACES PROTEINS OF THE HAIR CORTEX

ASSESSA

INNOVATION FOR A GREENER WORLD

NATURAL ORIGIN 97.22%

FILCORTEX VEG

FILCORTEX VEG is the result of the association of hair proteomics with biocomputing tools and associates the amino acids of the HGT KAPs with an exclusive Cuticle Interlock System – CIS which seals the amino acids into the hair fiber, increasing hair mass and reinforcing its structure. FILCORTEX VEG replaces proteins of the hair cortex, repairs brittle and damaged hair, replaces hair mass and acts as a thermal protector of hair fiber.

HAIR PROPERTIES

PROTEINS, LIPIDS AND MINERALS

Recent findings, based on highly sensitive proteo- mic analytical tools, show that human KIFs (Keratin Inter- mediate Filaments) are composed of acid (type I) and neutral (type II) keratins, organized in bundles: each keratin forms structures in the form of a spiral α-helix twisted in pairs that form larger structures known as **Protofibrils**.

Those, in turn, are organized in groups of four **Protofi- brils**, forming structures further reinforced known as **Fibrils**. The empty spaces of these complex structures are filled with proteins, known generically as **Keratin Associated Proteins**, or **KAPs**.

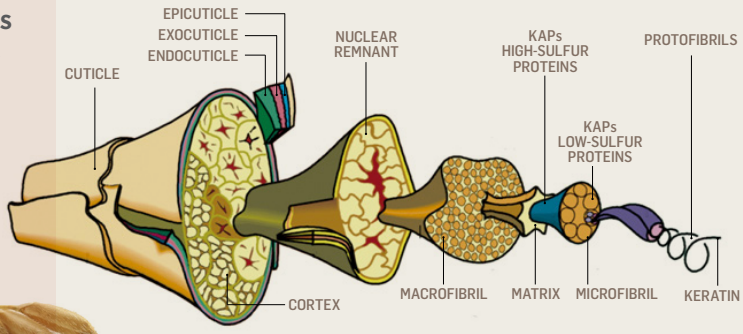
KAPs

KERATIN ASSOCIATED PROTEINS

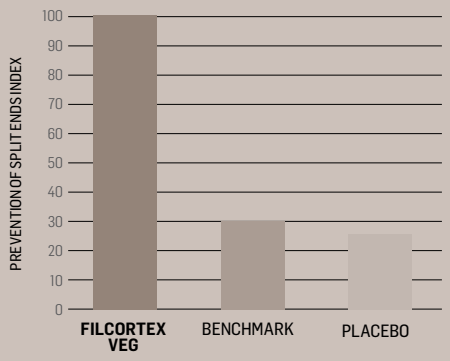
Two groups of proteins, generally called **High Sulfur KAPs**, present large amounts of sulfur containing amino acids and form crosslinks with keratin fibrils, being the main responsible for the structural strength of the hair fibers. A third group is composed of **Low Sulfur KAPs** and is known as the **HGT** group. Kaps of this group does not form crosslinks with the fibrils and act as a filling material between macrofibrils, adding flexibility and resistance to fibers.

Since they are not chemically bound to macrofibrils, the KAPs of the HGT group are less resistant than the High Sulfur KAPs and therefore are the first proteins to be damaged and removed by chemical or physical treatments of the fibers, causing a decrease in the cohesion between the proteins of the matrix, leading to the fragility of the hair fibers.

HAIR FIBER

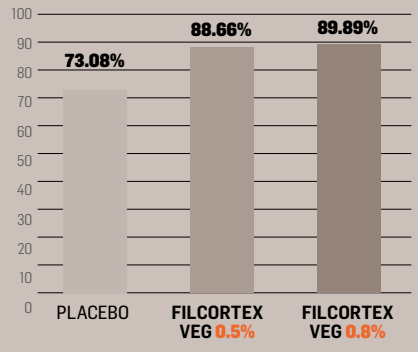


PREVENTION OF SPLIT ENDS



- **Filcortex VEG is 3.3 times better in the prevention of the appearance of split ends than a benchmark leave-on product with silicone.**
- **Filcortex VEG is 4 times better in the prevention of the appearance of split ends than a placebo formula.**

INCREASE IN HAIR DIAMETER



- **Hair treated with a mask containing 0.5% Filcortex VEG showed an increase in hair diameter of 21.31% compared to placebo. With 0.8% the increase was 23%.**

VEG FILCORTEX

REPLACES PROTEINS OF THE HAIR CORTEX

USAGE LEVELS

PRODUCT	%
SHAMPOO	1.0 to 3.0
CONDITIONER	1.5 to 3.0
LEAVE-IN	1.5 to 3.0
HAIR MASK	1.5 to 3.0
HAIR SERUM	1.5 to 3.0

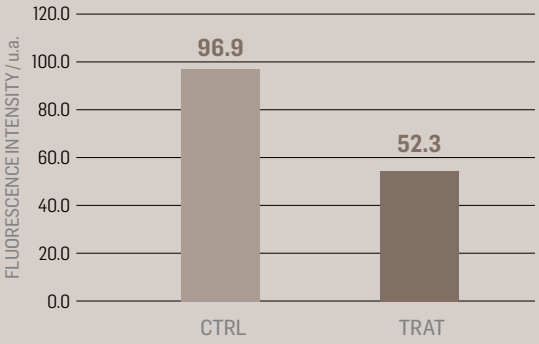
INCI NAME

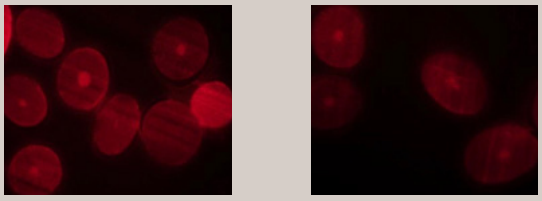
Aqua, Kappaphycus Alvarezii Extract, Laminaria Saccharina Extract, Hydrolyzed Rice Bran Protein, Hydrolyzed Soy Protein, Glycine, Sodium Benzoate, Potassium Sorbate

PROOF

Tresses submitted to one treatment cycle TRAT (shampoo+conditioner+mask) showed significantly lower cortical fluorescence intensity (1.9 times) in relation to strands in CTRL treatment. When a product with high substantivity is applied to hair, there is a connection between the active ingredients and damaged hair sites and thus the number of sites available for binding to the marker dye is reduced. Consequently, the fluorescence intensity is lower.

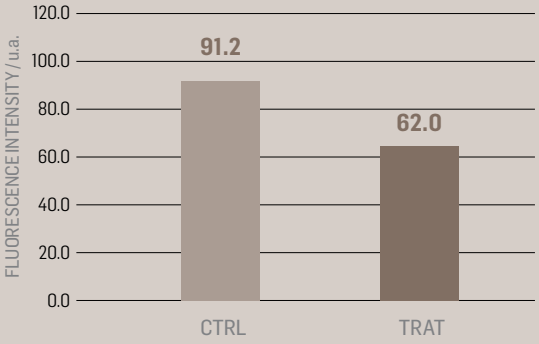
EFECTS ON THE CORTEX

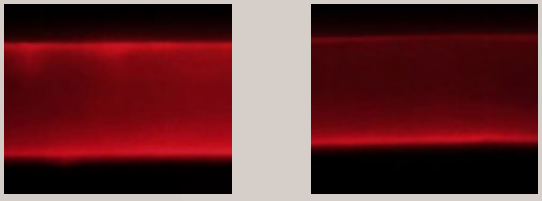




CTRL TRAT

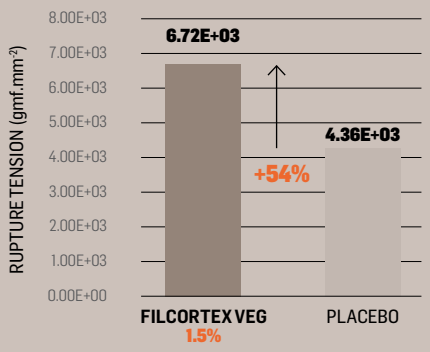
EFECTS ON THE SURFACE (CUTICLE LAYER)





CTRL TRAT

MORE STRENGTH ON DOUBLY BLEACHED HAIR

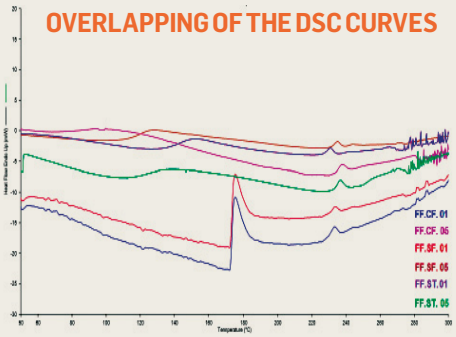


- **An increase of 54% in the values of rupture tension (gmf.mm^{-2}) of the double bleached hair strand was observed, comparing the strands treated with Leave On FILCORTEX 1.5% to the strands treated in the placebo group.**

THERMAL PROTECTION OF THE HAIR FIBER

The enthalpy necessary for the denaturation of α-keratin in hair treated with the products containing Filcortex increased by 62% after the first cycle. The treatment with Shampoo/Conditioner/Treatment cream/DD Cream with Filcortex, followed by drying and aligning (flat iron) was effective in protecting hair from heat damage.

OVERLAPPING OF THE DSC CURVES



LEGEND

FF.CF.01 - Active group 1st cycle
FF.CF.05 - Active group 5th cycle
FF.SF.01 - Placebo Group 1st cycle
FF.SF.05 - Placebo Group 5th cycle
FF.ST.01 -Control Group 1st cycle
FF.ST.05 - Control Group 5th cycle

The background noise observed at the end of the thermograms indicates the degradation of hair keratin.

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