

COBIOAGE

Skin Aging Exposome Protection

INCI NAME:

Propanediol, Aqua (Water), Caesalpinia Spinosa Fruit Extract.

DOSE OF USE:

0,5 - 5 %

SOLUBILITY:

Hydrosoluble

PRESERVATIVE:

Preservative free

COSMETIC USE:

- › Protects from skin aging exposome
- › Anti-aging, anti-wrinkle and firming
- › Protection of collagen, elastin and hyaluronic acid
- › Anti-pollution
- › Antioxidant
- › Anti-glycosilation

DESCRIPTION:

COBIOAGE is an **extract** from the pod of the *Caesalpinia spinosa*, a **native tree** from **Peru**.

Also known as **Tara**, or **Peruvian carob**, it is a rich source of **bioactive compounds**, (flavonoids, polyphenols and tannins) known as **chemoprotectors**, with a very powerful **anti-oxidant, firming and anti-aging activity**.

Recently, the term **EXPOSOME** has been defined as to all external exposure factors, with their interactions, that we face as humans during our life. It includes the body responses to those factors, most of them leading to clinical and biological signs of **skin aging**.

Among these factors are solar radiation (UV, visible and IR), environmental pollution, tobacco smoke, temperature, nutrition and others

Solar radiation triggers the increase of ROS levels (reactive oxygen species), generating oxidative stress, which induces lipid peroxidation, mitochondrial and DNA damage and protein glycosylation (changes in the structure and function of proteins).

In addition, high levels of ROS also activate the extracellular matrix metalloproteinases (MEC), such as elastase, hyaluronidase and collagenase.

COBIOAGE brings a **broad spectrum action**, acting on different parameters, giving cosmetic formulas versatile efficacy, essential to meet the current demand presented by the **skin aging exposome**.

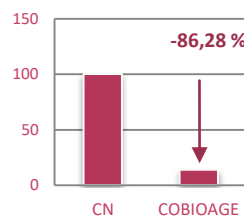
PROPERTIES:

- **Anti-wrinkle and firming:** due to its ability to inhibit elastase, hyaluronidase and collagenase, and thanks to its **elastin stabilizing effect** and its capacity to induce **collagen synthesis**.
- **Anti-aging & photoaging protection, anti-pollution:** Thanks to its anti-oxidant capacity, its protection against ROS damage and its protective effect against lipid peroxidation and protein glycosylation.

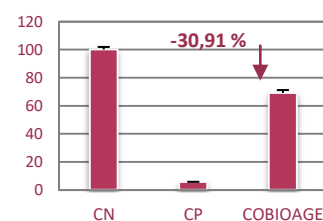


Evaluation of the Anti-aging, firming & Anti-pollution activity:

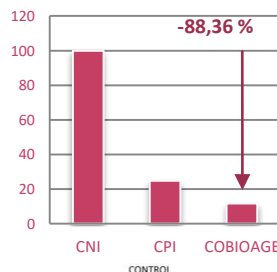
LIPID PEROXIDATION ACTIVITY %



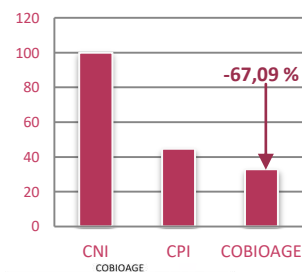
GLYCOSILATION ACTIVITY %



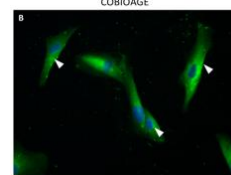
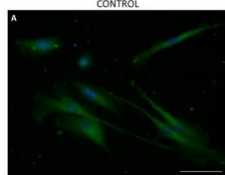
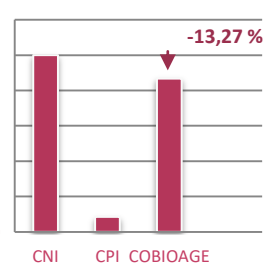
COLLAGENASE ACTIVITY %



HYALURONIDASE ACTIVITY %



ELASTASE ACTIVITY %



Immunofluorescence of Collagen I synthesis in human fibroblasts treated with 0.1% COBIOAGE.

N a t u r a l l y E f f e c t i v e