



INVERTAGE™

FIGHTS AGING FROM THE INSIDE OUT



SIGNIFICANT COLLAGENASE REDUCTION

PROTECTION AGAINST OXIDATIVE STRESS

DECREASE IN WRINKLE DEPTH

DESCRIPTION

INVERTAGE™ is a nutricosmetic formulation achieved by the combination of food-grade functional ingredients such as vitamins, hydrolyzed proteins, natural extracts and essential fatty acids, designed to prevent and fight skin aging from the inside out.

PRESENTATION

Powder and pearly purple capsules.

COMPOSITION

Fish Hydrolyzed Collagen; Evening Primrose Oil in powder form (*Oenothera Biennis*); Tomato Extract (*Lycopersicon Esculentum*, Lycopene); Vitamin E Acetate (α -Tocopheryl Acetate); Pomegranate Extract (*Punica Granatum*); Marigold Extract (*Tagetes Erecta*, Lutein); Anti-caking agent: Magnesium Sterate; Colour*: Titanium Dioxide (E171), Allura Red AC (E129), Brilliant Blue FCF (E133).

*Applicable for the capsules version only

A COSMETIC AND NUTRITIONAL VIEW

Nutricosmetics are functional food ingredients that offer cosmetic benefits through an internal route and are obtained by coupling principles of nutrition and cosmetics.

Collagen is the most abundant protein in the skin and the major component of the extracellular matrix (ECM). A major feature of aged skin is reduced collagen synthesis and increased degradation, resulting in connective tissue damage, and loss of the skin three-dimensional integrity.

INVERTAGE™ is a nutricosmetic formulation that provides an anti-aging effect from the inside out. Nutritional experts have carefully chosen a mixture of anti-aging nutrients inspired in the Mediterranean diet which is worldwide known for its beneficial effects.

Pomegranate extract, a functional ingredient contained in **INVERTAGE™**, protects collagen from degradation, by inhibiting the collagenase activity and decreases oxidative stress.

APPLICATIONS

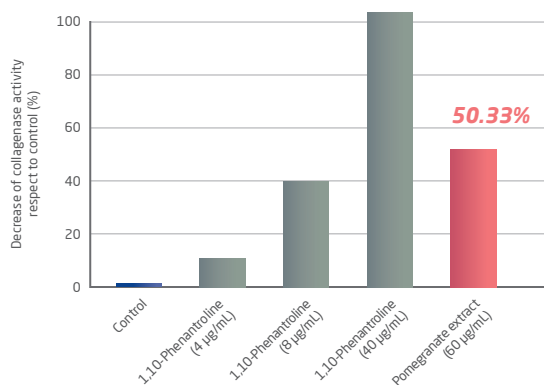
Suitable for food supplements.



IN VITRO EFFICACY

1. ANTI-COLLAGENASE ACTIVITY

The collagenase inhibition activity of Pomegranate extract was evaluated by the Molecular Probes EnzChek Gelatinase/Collagenase Assay Kit. The increase in fluorescence of fluorescein-labelled collagen is proportional to proteolytic activity.

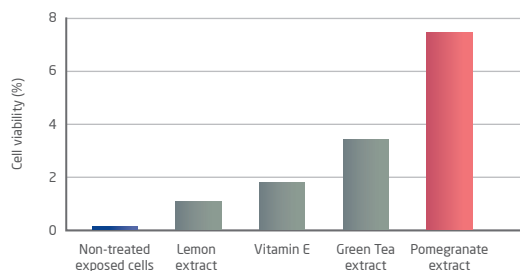


INVERTAGE™ REDUCES COLLAGENASE ACTIVITY

Pomegranate extract showed an anti-collagenase effect at the tested concentration.

2. REDUCTION IN OXIDATIVE STRESS

The activity of potential antioxidant products has been evaluated by a cell viability assay on human dermal fibroblasts. Cells were incubated and pre-treated with 0.5 µg/mL of Lemon extract, Vitamin E, Green Tea extract or Pomegranate extract for 30 minutes at 37 °C. Then, the cultures were exposed to 1.47 mM H₂O₂ for 24 hours.



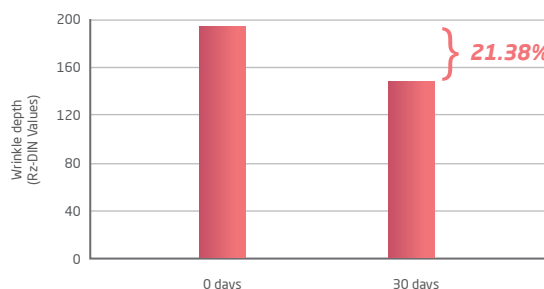
INVERTAGE™ IS EFFECTIVE AGAINST OXIDATIVE STRESS

Pomegranate extract showed a greater protective effect than Lemon extract, Vitamin E and Green Tea extract.

IN VIVO EFFICACY

ANTI-WRINKLE EFFICACY

A panel of 20 female volunteers aged 39 to 55 took one capsule containing 468.6 mg of **INVERTAGE™** once daily for 30 days. Measurements on the crow's feet area were taken before the test and after 30 days of treatment. Wrinkle depth was determined by means of the optical 3D measurement PRIMOS.



INVERTAGE™ EFFICIENTLY IMPROVES WRINKLES DEPTH FROM THE INSIDE OUT

21% decrease in wrinkle depth after 30 days.