

DC Antiglycagen

Skin Protection Against Glycation



DC Antiglycagen

INCI : Water (and) Humic Acids
(and) Butylene Glycol (and)
Olea Europaea (Olive) Fruit
Extract

CAS #: 7732-18-5, 1415-93-6, 107-88-
0, 84012-27-1

EC #: 231-791-2, 215-809-6, 203-529-
7, N/A

Anti-aging

Anti-irritant

Antioxidant

Firming & Nourishing

**Reduction of Wrinkle
Appearance**

Daily Protection

Sensitive Skin

Recommended applications



Skin Care



Sun Care



A unique combination of Humic Acids and Verbascoside-rich Olive extract. DC Antiglycagen protects collagen and elastin for younger looking skin.

Glycation, sometimes referred to as the Maillard reaction, is a process typically associated with aging and oxidative damage in which certain sugar molecules chemically bond to proteins or lipids without the moderation of an enzyme. When glycation occurs in the skin, it causes the crosslinking of collagen and elastin resulting in a loss of skin flexibility, elasticity and resilience, thus causing skin aging and wrinkles. In addition, glycation leads to the production of harmful substances known as advanced glycation end products (AGEs). AGEs are one of the primary causes of cellular aging. They are highly reactive free radicals and oxidizers which further the glycation process and initiate harmful inflammatory and autoimmune responses.

DC Antiglycagen is an anti-aging ingredient specially designed to help protect collagen and elastin against glycation and its damaging by-products. By fighting off AGEs, DC Antiglycagen helps restore skin smoothness, elasticity and helps heal dry, damaged skin. Rich in trace minerals, phytonutrients and natural ultra-powerful anti-oxidants (verbascoside and humic acid), DC Antiglycagen is a safe and effective means to protect the skin from premature aging and environmental stressors such as UV radiation, pollution and chemical irritants.

 Vantage

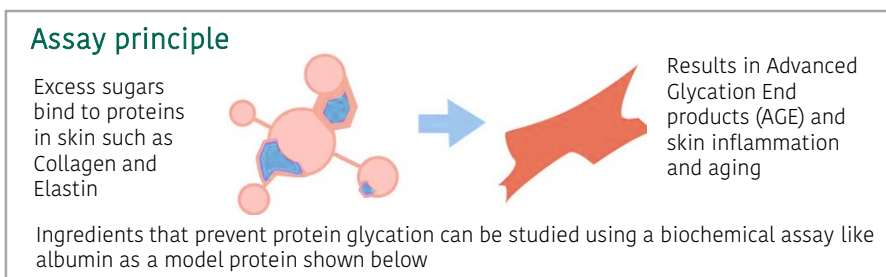
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Appearance	Liquid/Gel
Odor	Characteristic
Color	Light Brown to Dark Brown
pH	3.0-5.0
Specific Gravity	0.990-1.150
Recommended Use Level	1%
Preservative System: Phenoxyethanol, Caprylyl Glycol and Hexylene Glycol	

Anti-glycation efficacy

DC Antiglycagen inhibited protein glycation by 39% at low concentration.



Method

Following reactions were set up

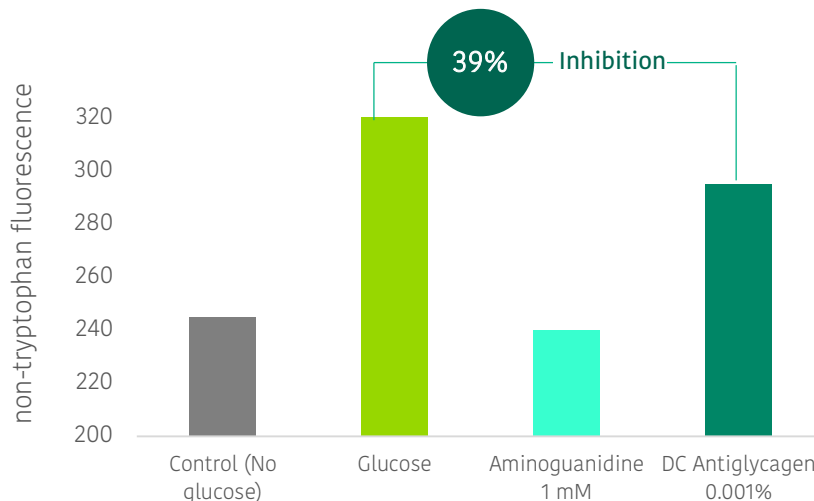
- Negative control is 10mg/ml albumin without glucose.
- Positive control is 10mg/ml albumin with glucose
- Test - 10mg/ml albumin + 500 mM glucose + 1mM aminoguanidine hydrochloride (Sigma 396494)
- Test - 10mg/ml albumin + 500 mM glucose + 0.001% DC Antiglycagen

Samples were incubated with the reaction mixture for 10 days at 37°C in 5% CO₂ atmosphere.

Protein glycation was detected by measuring the increase of non-tryptophan fluorescence (excitation at 360nm) using Cytofluor2350 (Millipore)

Argirovand Argirov, Method based on 2003 with modifications

Measurement of Anti-glycation efficacy



Formulation guidelines

DC Antiglycagen can be used in skin care and color cosmetic formulations. It can be easily added with medium propeller mixing after phase combination below 40°C during the cooling phase. The ideal pH range for systems containing DC Antiglycagen is between 4.0-8.0. In skin care, DC Antiglycagen is recommended for use in anti-aging treatment products. DC Antiglycagen may contribute some color to base depending on use level.