ΒΙΟΑΛΚΣΜΙΑ

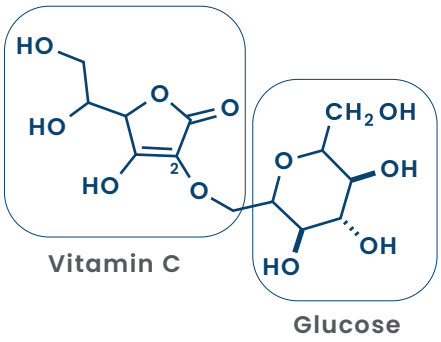
Whitening Anti-oxidant Anti-aging

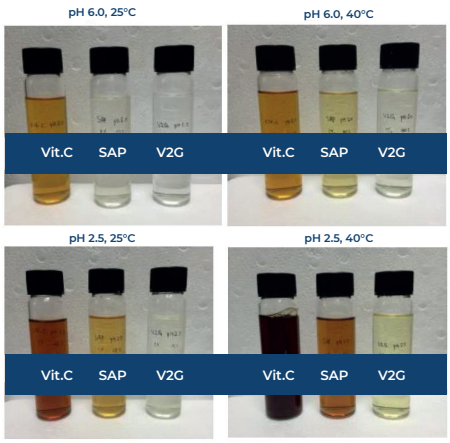
IVIT GLUCOSIDE C

Water soluble vitamin C derivative. Ascorbic acid is the pure form of vitamin C. It is one of the most powerful and well known antioxidants in the market. The main disadvantage is the limited stability in cosmetic formulations. Ascorbyl glucoside is one of the most stable versions of vitamin C.

Ascorbyl Glucoside

• Conjugated molecule of Glucose and Vitamin C.
• C2 of Vitamin C is the primary site of natural vitamin C degradation.
• Manufactured by an eco-friendly bioprocess, transferring a glucose molecule from Starch to Vitamin C using an enzyme, Glycosyltransferase.





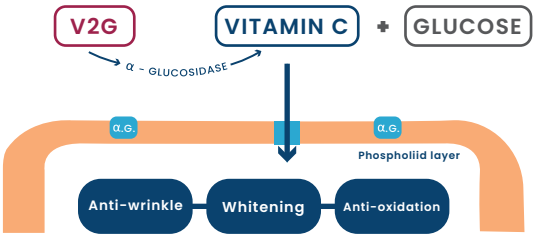
Application

Function

Anti-wrinkle, anti-aging, pro-collagenic, UV protection, Whitening, anti-oxidant.

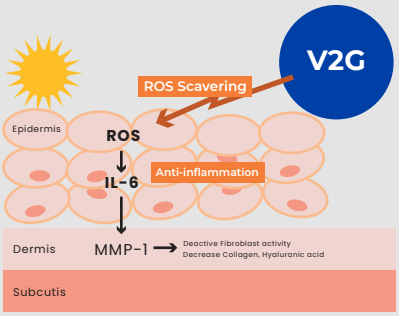
Mechanism

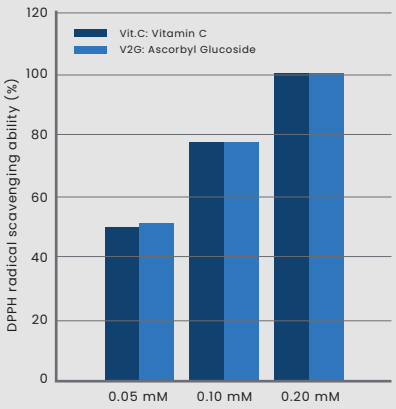
Representation of the enzymatic cleavage by glucosidase.

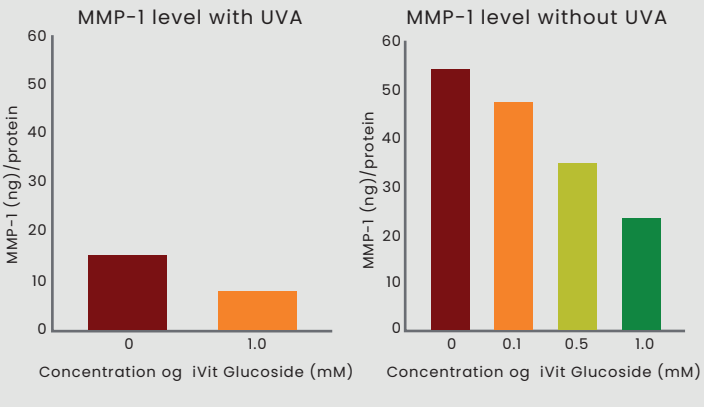


Anti-oxidant

Ascorbyl glucoside inhibits the pro-inflammatory response due to the effect of ROS.



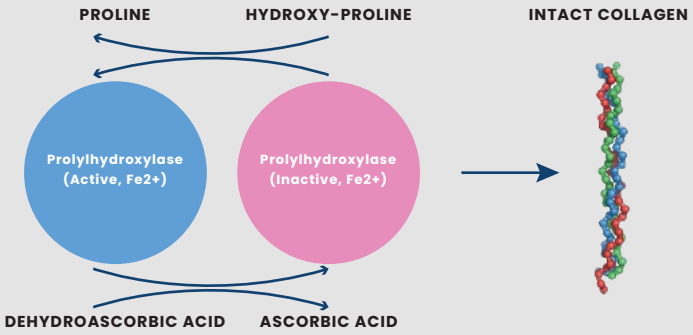




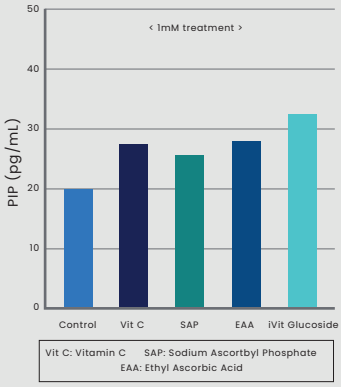
iVit Glucoside C inhibited MMP 1 expression on both, UVA irradiated and non irradiated keratinocytes.

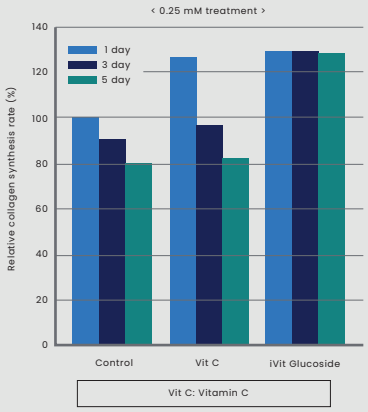
Anti-aging

iVit Glucoside boosts up the activity of prolylxydroxylase into the active form of vitamin C. It plays an active role in the maturation of pro-collagen into collagen.



iVit Glucoside boosts up the activity of Prolylhydroxylase is convertes into the active form by Vitamin C.

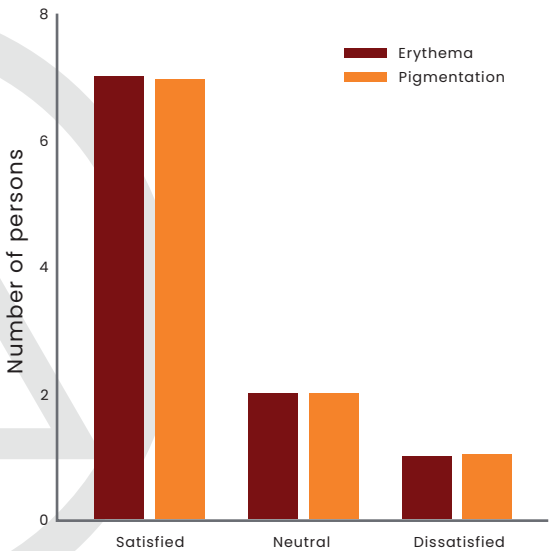


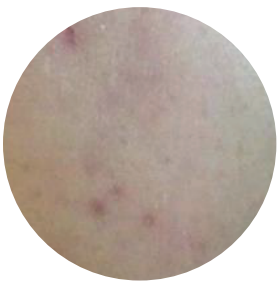


1. Innoculation of Fibroblasts.
2. Add each substances
3. Culture cells
4. analysys of the concentration of pro-collagen

Clinical Test

Reduction of the erythema formation and melanin production.
iVit glucoside was applied 3 times per week during 3 weeks in a serum formulation at 2%.

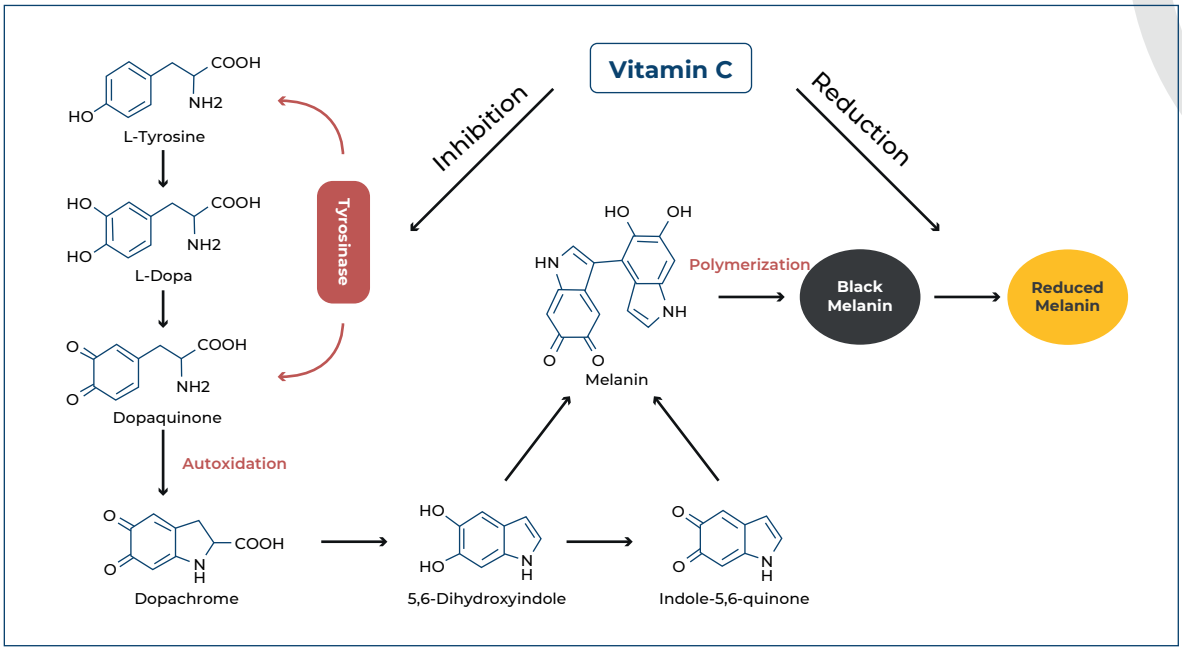




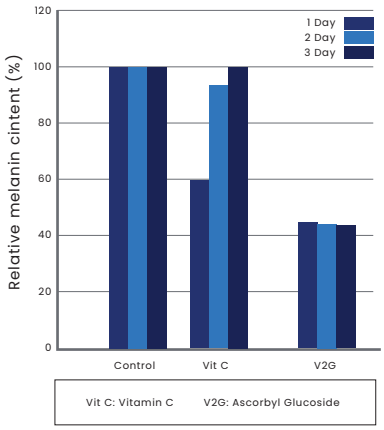
BEFORE

AFTER

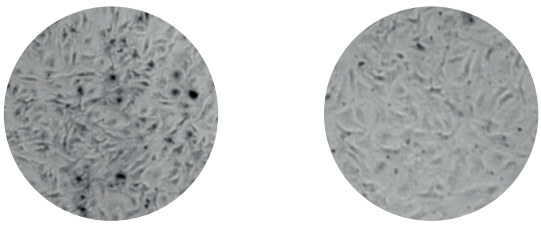
Whitening



• It suppresses melanin formation in melanocyte by inhibiting the reaction center Cu 2 + ion of tyrosinase, the rate limiting enzyme of melanogenesis.
• It also converts existing melanin polymer into the colorless reduced melanin in skin.



Evaluation with optical microscopy of melanin content. Melanin synthesis was induced by addition of MSH.



MSH only

MSH only +
iVit Glucoside 10mM

*aMSH: Melanocyte Stimulant Hormone

TECHNICAL DATA

1. PRODUCT INFORMATION

INCI Name (US)	Ascorbyl Glucoside
INCI Name (EU)	Ascorbyl Glucoside
Appareance	Powder
Color	White
Ph Value (Soln/Water)	2.2-2.4
Melting Point	158-163°C

2. FORMULATIONS ADVICES

Refference addition	0.1-5.0%
Soluble in water	125g/100g