



New Generation Vitamin C Derivative

Et-VC™

Previously known as **Corum 9515**
3-O-Ethyl Ascorbic Acid

AS POTENT AS VITAMIN C
WITH BETTER STABILITY

Et-VC™

INCI: 3-O-Ethyl ascorbic acid

Also known as:

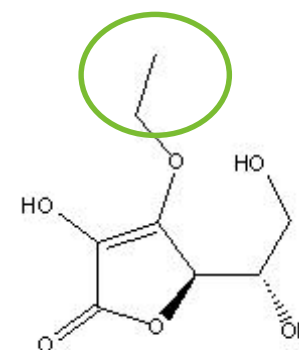
3-O-ethyl ascorbic ether
3- O-ethyl ascorbic acid

CAS: 86404-04-8

MW: 204.18

Physical Properties

- Purity > 99.0%
- White crystalline powder
- Water soluble
- Metabolized by the human body in the same manner as L- ascorbic acid (Vitamin C)
- Excellent stability



The Functions of Et-VC™



Skin lightening & Balance skin tone

Reduce dark spot & age spot

Anti-photoaging

Collagen synthesis

Reversing auto-oxidation

Radical scavenging

DNA protection

Easy to penetrate the epidermis

CORUM

Advance through Knowledge

Et-VC™ Efficacy Studies

- ***In-vitro* tyrosinase inhibition**

- Reducing activity

- *In-vitro* whitening activity

- *Ex-vivo* melanin assay

- *In-vivo* whitening efficacy

- Collagen synthesis

- Anti-photoaging

- Anti-oxidation
(radical scavenging)

- Anti-inflammation

- DNA protection

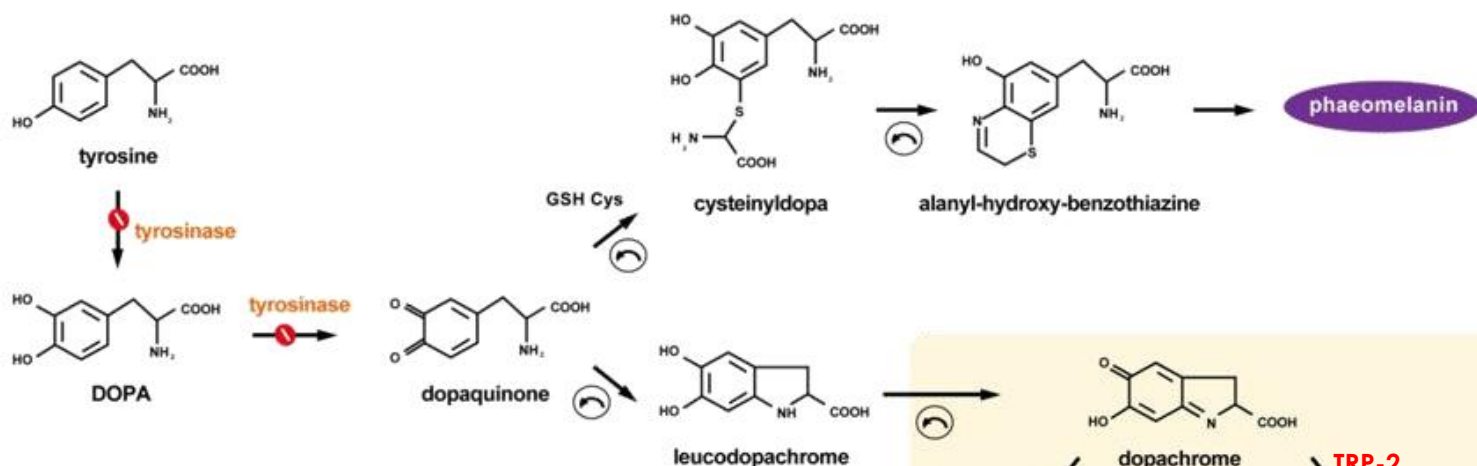
- Skin penetration profile



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Advance through Knowledge

Et-VC™ Whitening Mechanism



Three melanin-generating enzymes:

1. Tyrosinase
2. TRP-2 (DOPAchrome tautomerase)
3. TRP-1 (DHICA oxidase)

- Inhibit the reaction center Cu^{+2} ion of tyrosinase
- Inhibit the activity of TRP-2
- Reduce oxidized melanin pigments

Ref: Briganti, S et al. (2003) Chemical and Instrumental Approaches to Treat Hyperpigmentation Pigment Cell Res 16:101–110.

Et-VC™ Summary

- **Effective** and **stable** skin lightening agent
- Balance the skin tone
- Reduce dark spot
- Prevent photoaging
- Increase collagen synthesis
- Excellent anti-oxidation properties
- Scavenge radical
- DNA protection

