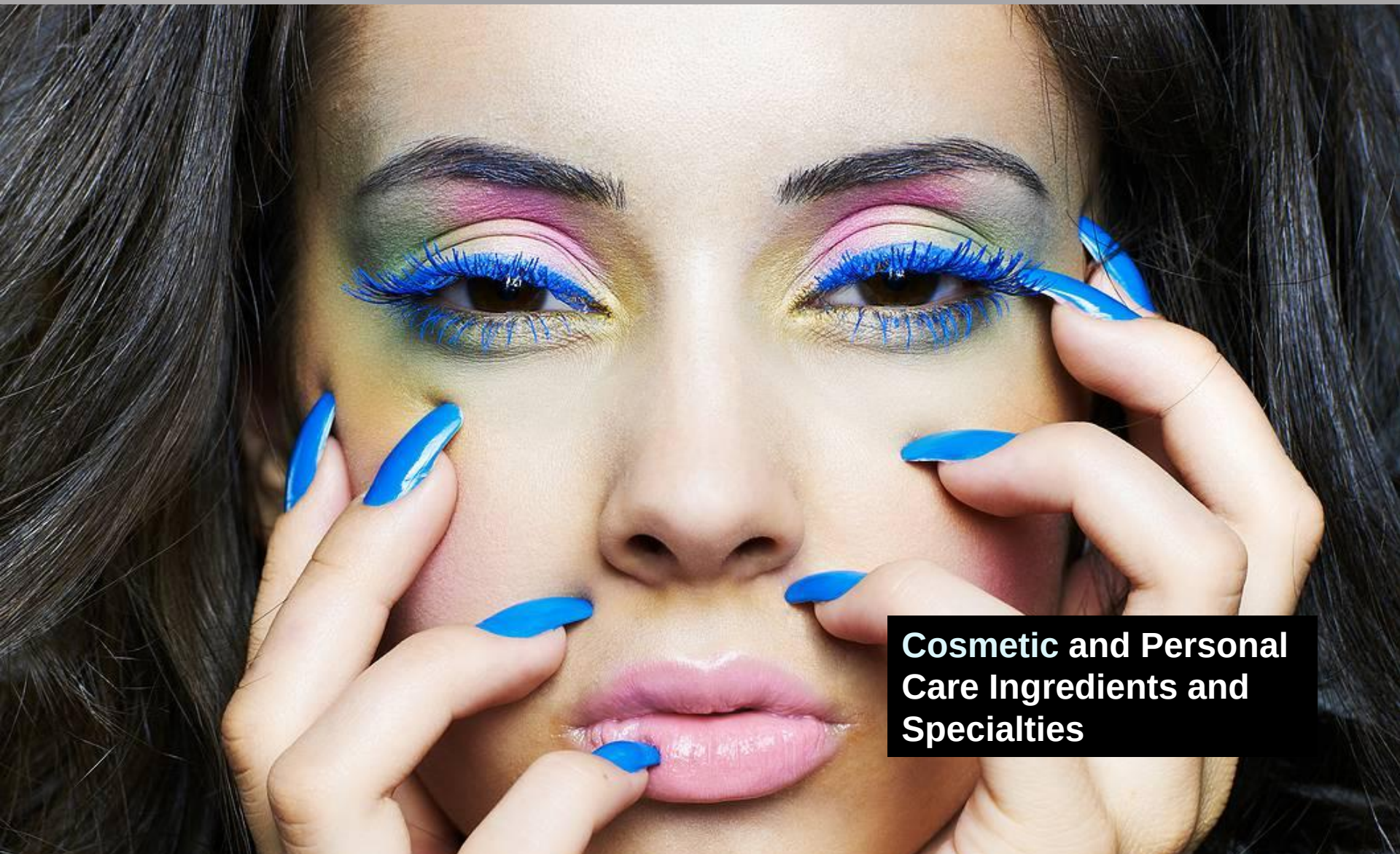
ARGAN Co.

Phone: 818.709.7070 Fax :818.709.7171 Email: info@arganco.com



Cosmetic and Personal Care Ingredients and Specialties

ARGAN Co.

ARG-GLABRIDIN









ARGAN Co.

Argan Co. is a highly versatile supplier of personal care and cosmetic ***solutions*** for all your formulation needs.

In addition to its extensive array of cosmetic ingredients, Argan provides customization of raw materials, scale up and pilot production pilot services, formulation assistance and ready to use products.





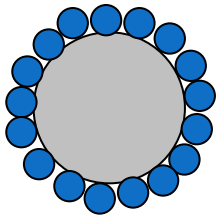




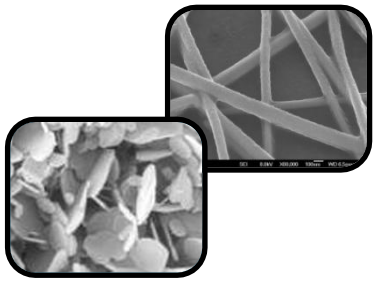
ARGAN Co.

CAPABILITIES

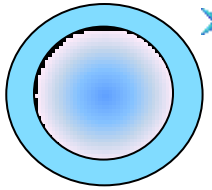
Manufacturing Technologies
- Emulsion (Dispersion)
- Polymerization
- Sol-Gel Technology
- Hybridization
- Particle Coating



Lab & Pilot Scale Technologies
- Particle Synthesis
- Formulation
- Technical Assistance



Cosmetic Powder Technologies
- Spherical
- Mineral based
- Surface modified
- Effects Pigments
- Colorants
- Treated
- Functional



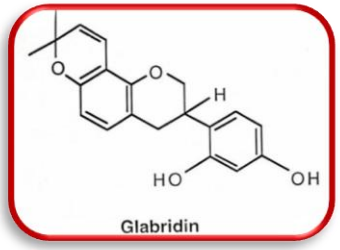
Background

ARG-GLABRIDIN is a high purity, glycyrrhizic flavone derived from the root of the plant Glycyrrhiza Glabra, licorice.

This natural plant extract provides safe and effective skin lightening without irritation or sensitization. It is rich in bioflavonoids and plant phenols which act as powerful anti-oxidants and free-radical scavengers to protect skin from environmental aggressors that may cause irritation and premature aging.







Glabridin

ARGAN Co.

ARG-GLABRIDIN

INCI Name: Glycyrrhiza Glabra (Licorice) Root Extract

CAS Number: 84775-66-6

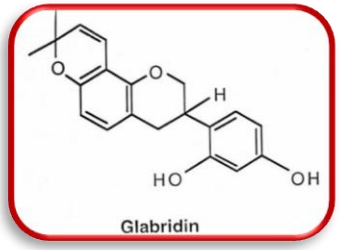
EINECS Number: 283-895-2

Active Ingredient: Glabridin

Molecular Formula: $C_{20}H_{20}O_4$







ARGAN Co.

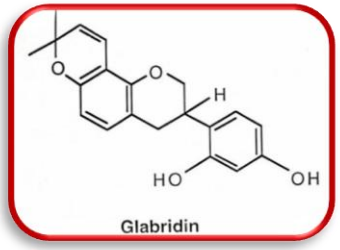
ARG-GLABRIDIN

Physical Properties

Form	Crystalline powder
Color	White to off-white
Assay (HPLC)	Min. 90.0% Glabridin
Flavone Test	Positive
Heavy Metals (Pb)	Not more than 20ppm
Arsenic (As)	Not more than 2ppm







Glabridin

ARG-GLABRIDIN

Effect

Whitening

- •Quick and highly effective skin lightening
- •Tyrosinase inhibition- More effective than Arbutin, Kojic acid, Vitamin C and Hydroquinone in inhibiting melanogenesis
- •Inhibits the activity of Tyrosinase Reactive Protein (TRP) as well as α-Melanocyte-Stimulating Hormone (α-MSH)

Free Radical Scavenger

- •SOD-like activity to scavenge oxygen free radicals

Anti-Oxidant

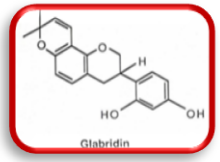
- • Comparable activity to Vitamin E

Anti-Inflammation

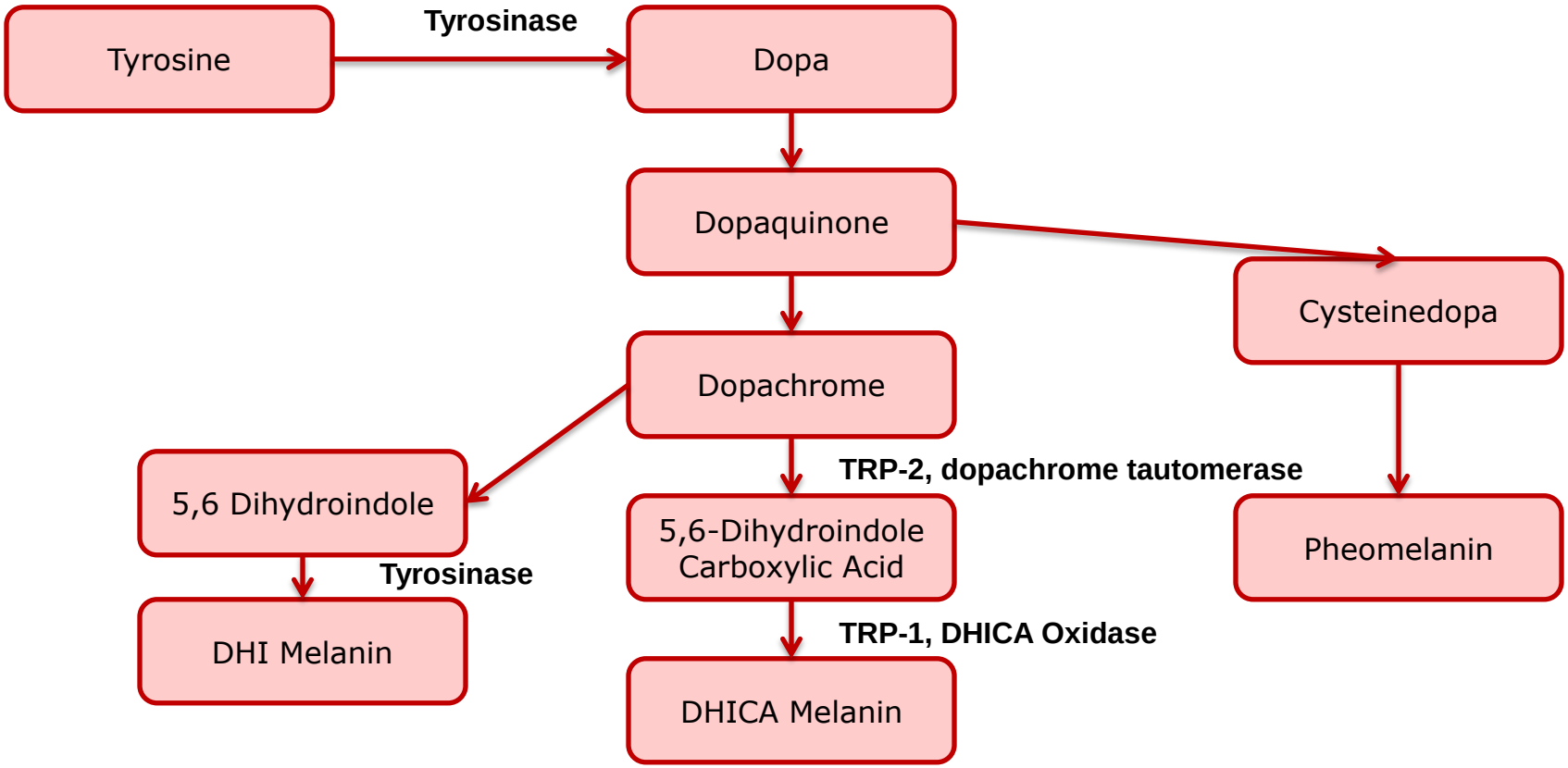
- •Reduces inflammation and redness associated with UV exposure. Also provides anti-sensitizing and anti-irritation properties



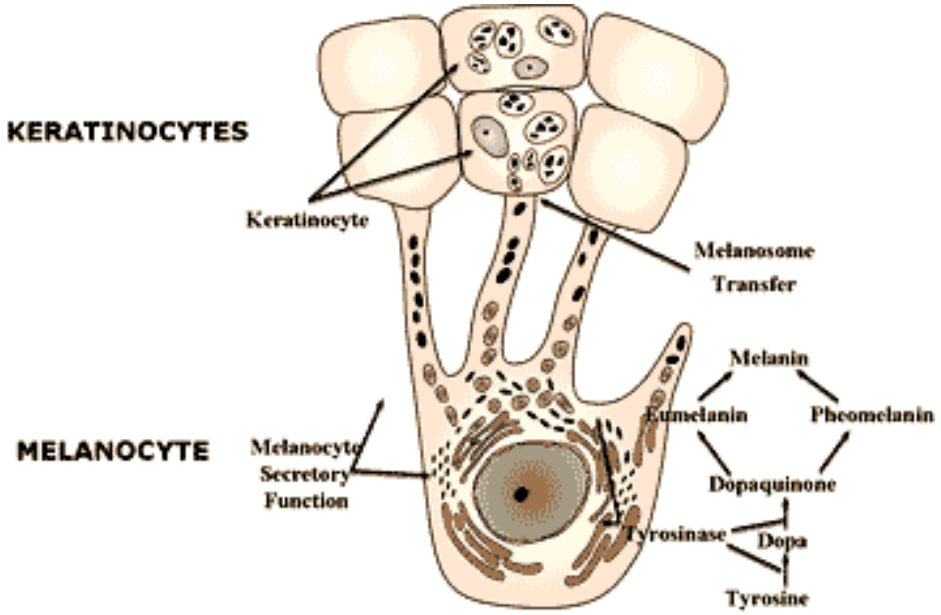




Mechanism


Tyrosine
Tyrosinase
Dopa
Dopaquinone
Cysteinedopa
Dopachrome
5,6 Dihydroindole
TRP-2, dopachrome tautomerase
5,6-Dihydroindole Carboxylic Acid
Pheomelanin
Tyrosinase
DHI Melanin
TRP-1, DHICA Oxidase
DHICA Melanin

Whitening Pathway

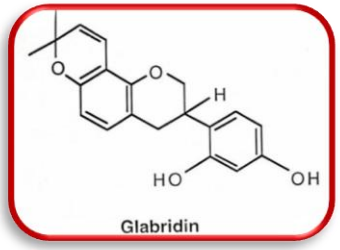


Skin Lightening/Whitening

1. **Prevention:** Reduce the absorption of UV light
2. **Protection:** Anti free radicals and inflammation
3. **Activity of Melanocyte :** Reduce the production and activity of melanocyte
4. **The Process of Melanocyte Synthesis:** Inhibit the activity of enzymes
5. **The Existing Melanin:** Eliminate the existing Melanin
6. **Accessorial Step:** Accelerate the metabolism of cells, help eliminate melanin from skin

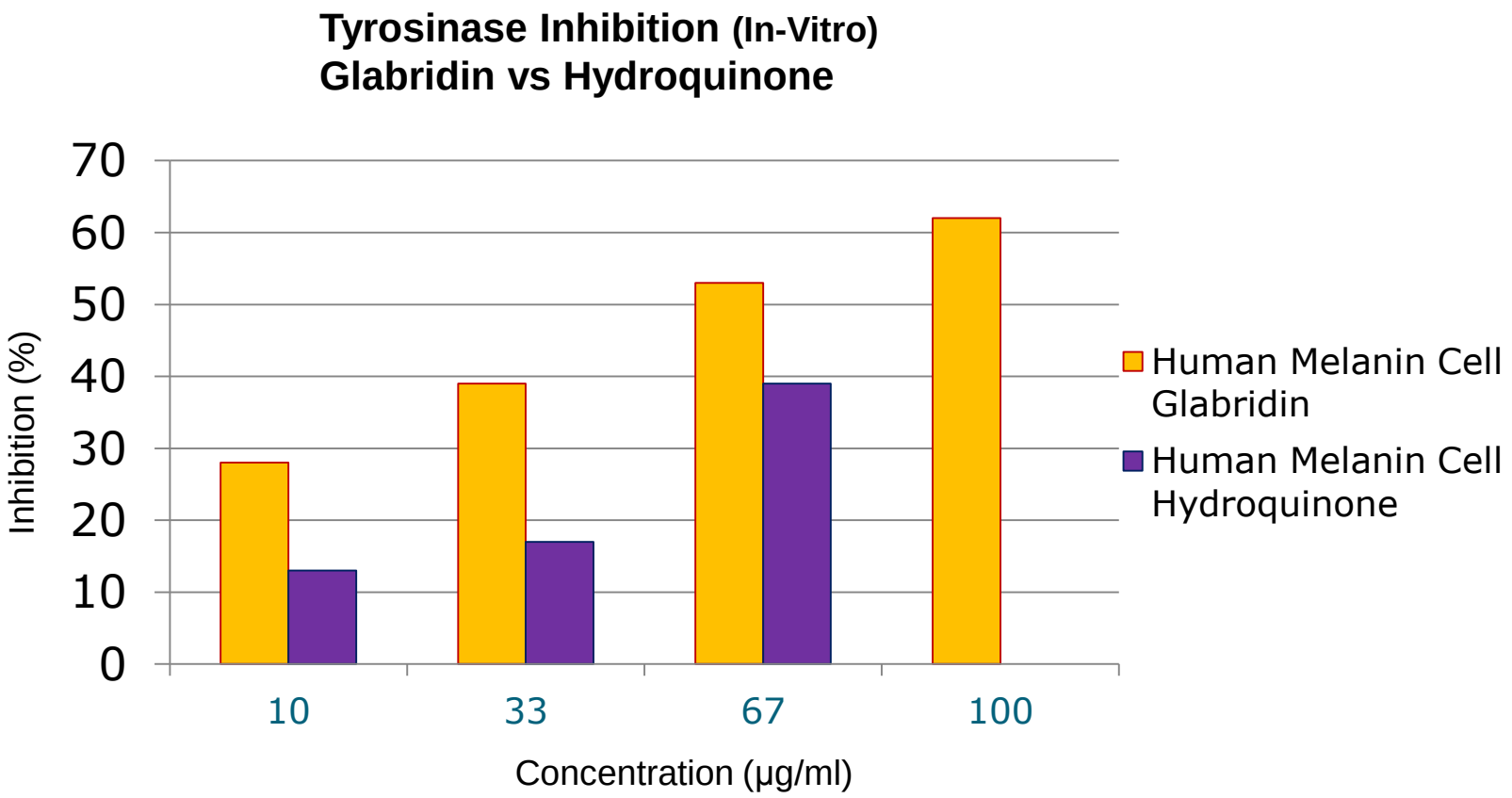






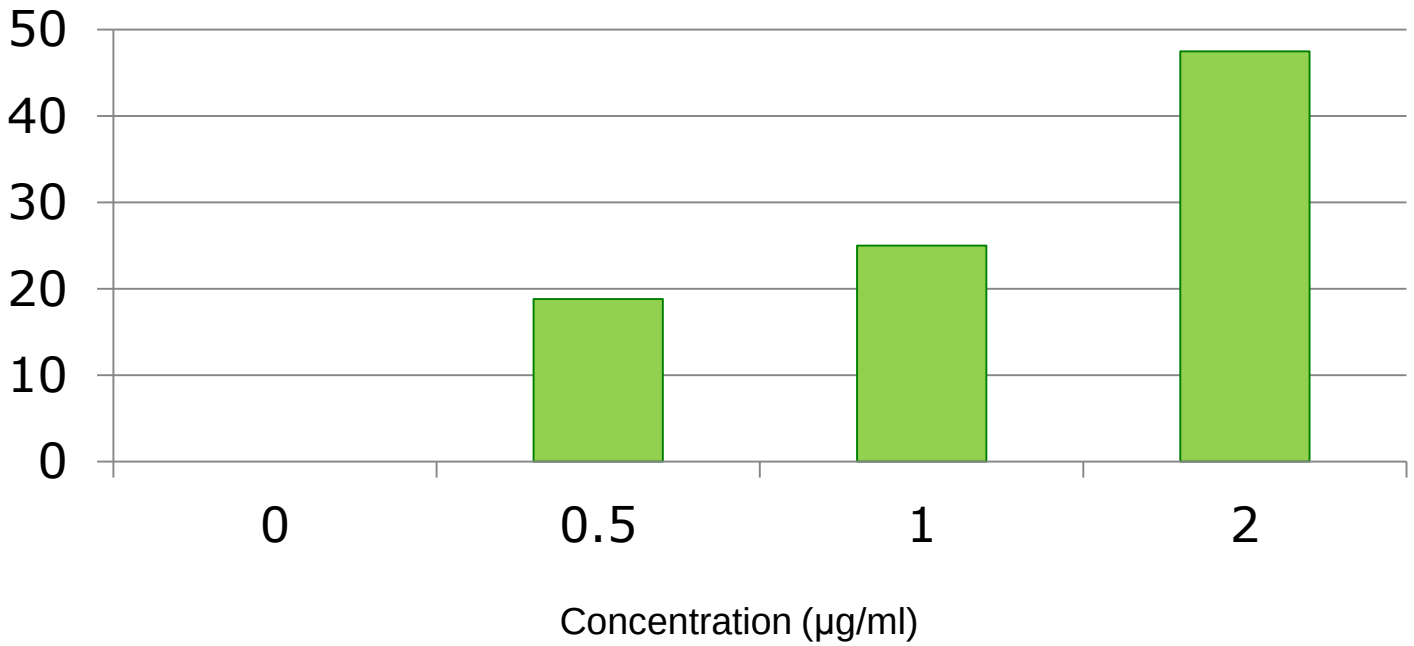
Glabridin

ARG-GLABRIDIN

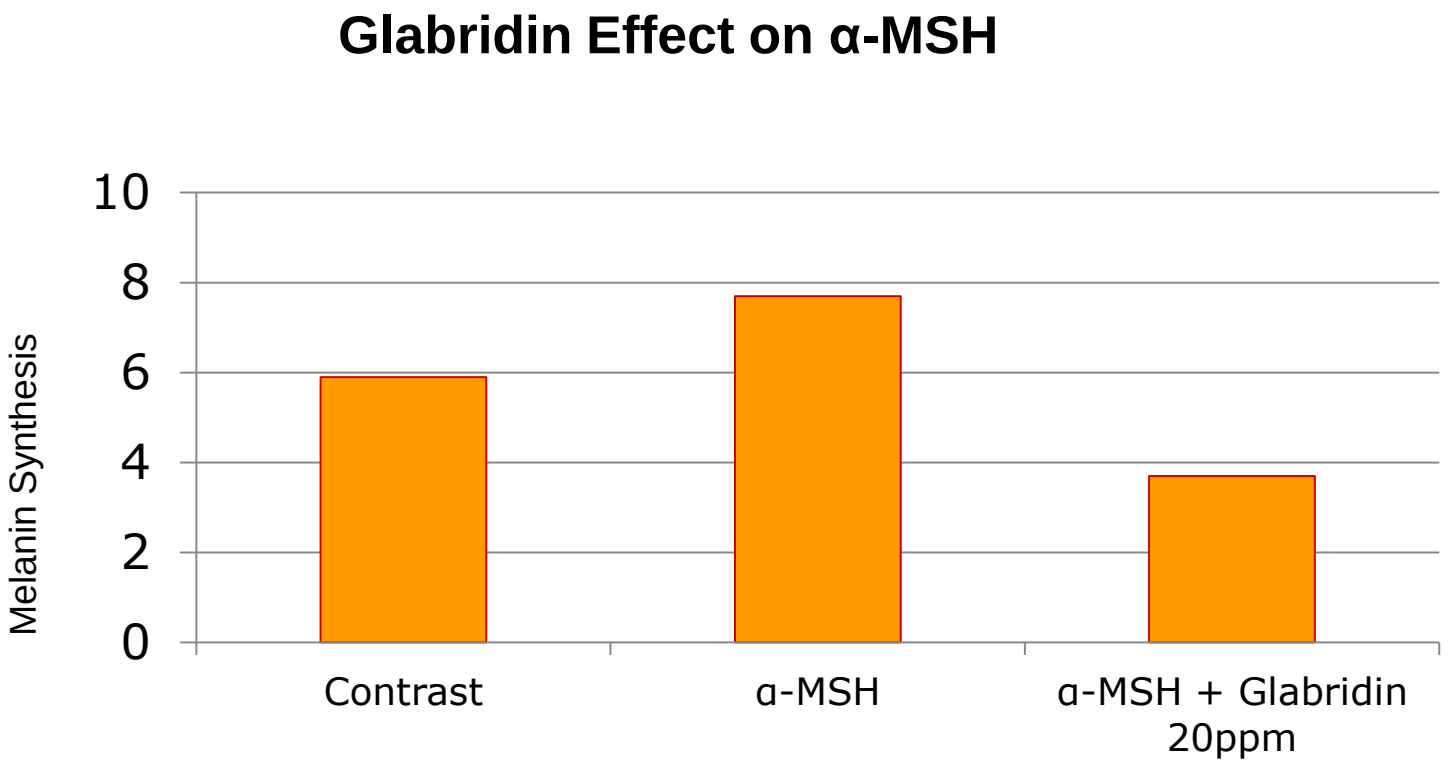


ARG-GLABRIDIN

Glabridin Effect on TRP-2(In-Vitro)



ARG-GLABRIDIN



Glabridin Efficacy (In-Vitro)

Glabridin inhibits the proliferation of human melanocyte

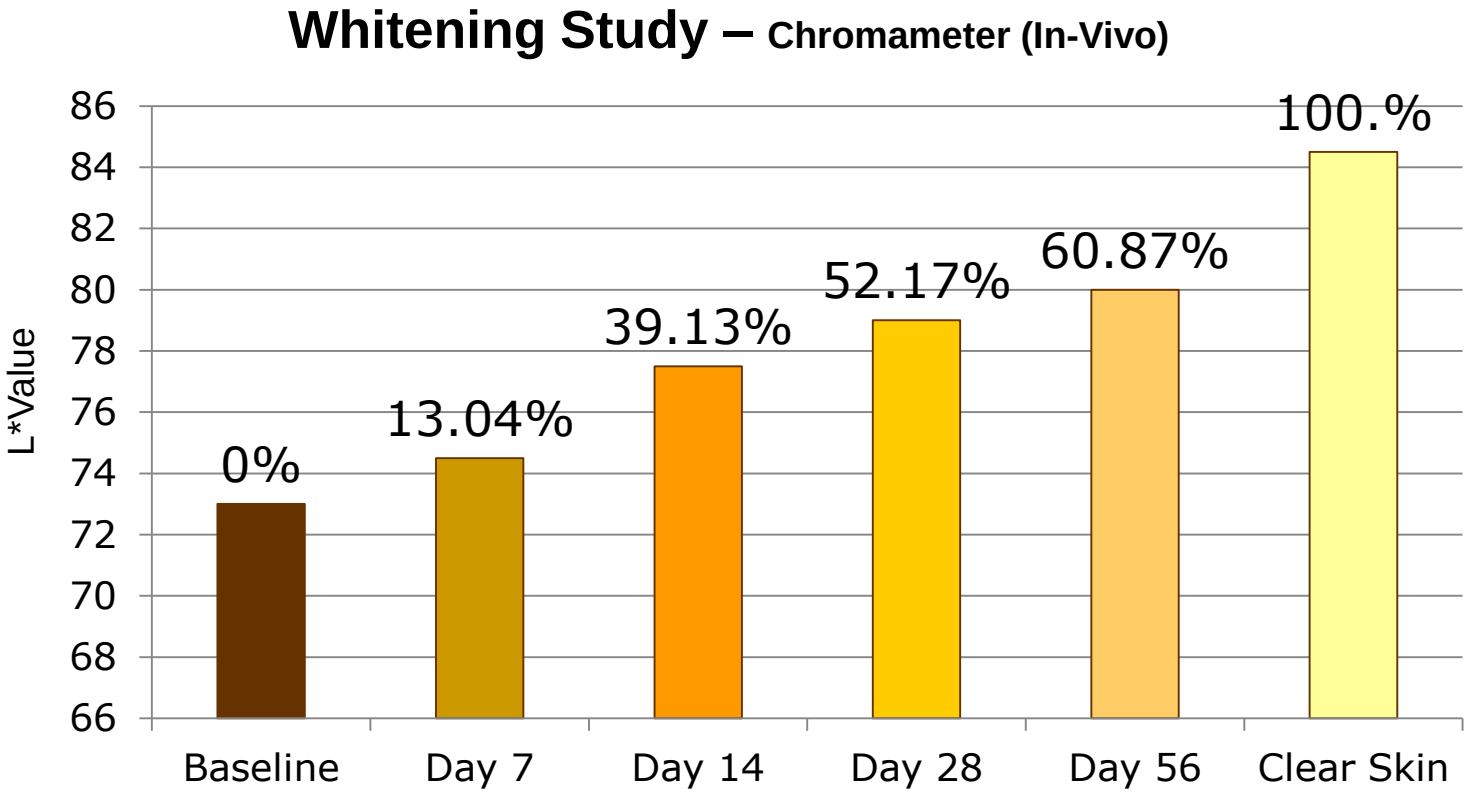


Contrast，Day 5（X300 times）



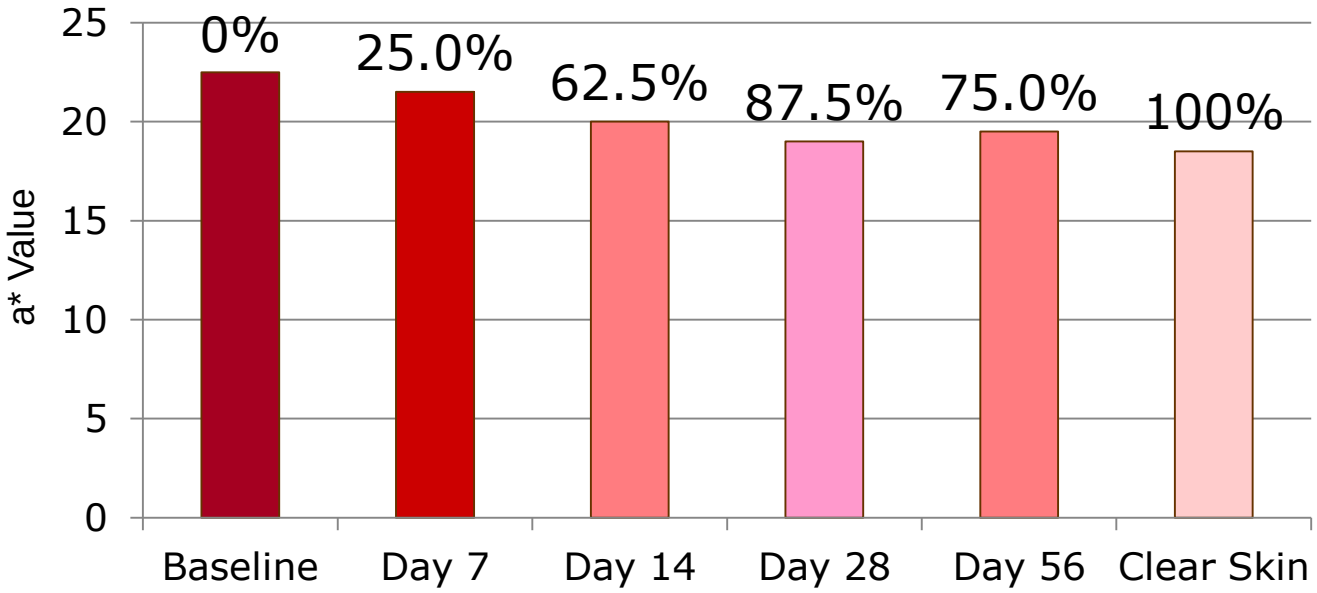
Glabridin 50μg/ml，Day 5（X300 times)

ARG-GLABRIDIN



ARG-GLABRIDIN

Redness Reduction – Chromameter (In-Vivo)



Effect – Human (In-Vivo)



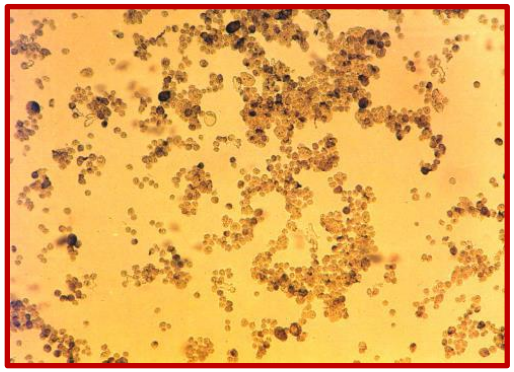
ARG-GLABRIDIN

Effect – Human (In-Vivo)

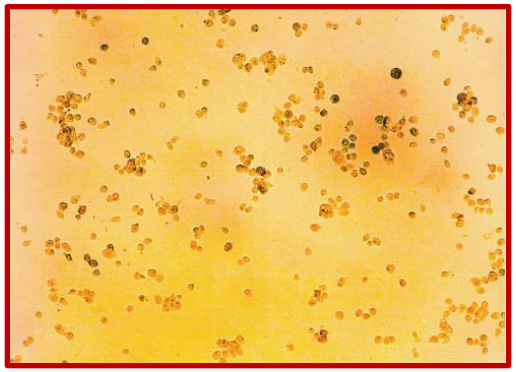


Whitening Effect – on B16 Cells

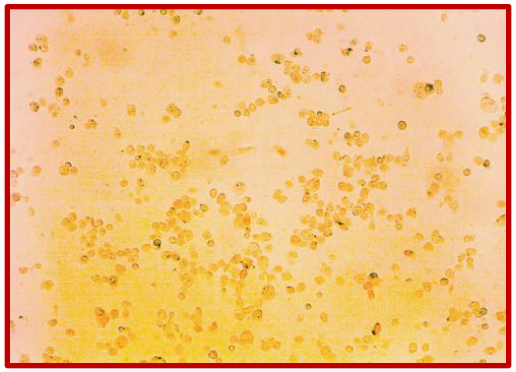
B16 contrast (X100 times)

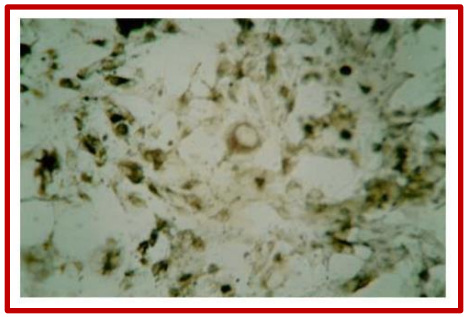


10 ppm



20ppm





Contrast



2ppm



5ppm

ARG-GLABRIDIN

Application

FORMULATION GUIDELINES

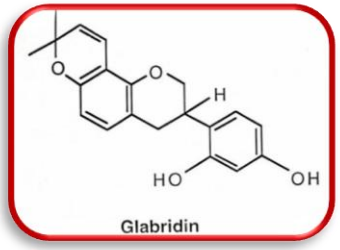
Use Level: 0.01-0.05%

Oil & Glycol Soluble

Excellent for anti-aging, suncare, skin lightening, and skin clarifying products







ARGAN Co.

THANK YOU







