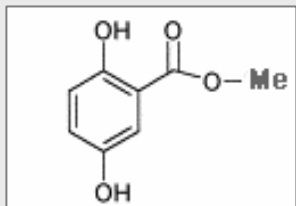


DC Skin Bright AF

Tyrosinase inhibitor in a pro-liposome delivery for skin brightening products

DC Skin Bright AF, an alternative skin brightener delivers methyl dihydroxybenzoate via a pro-liposome delivery. In vitro studies have shown that methyl dihydroxybenzoate inhibits melanin secretion in human melanocyte cells.



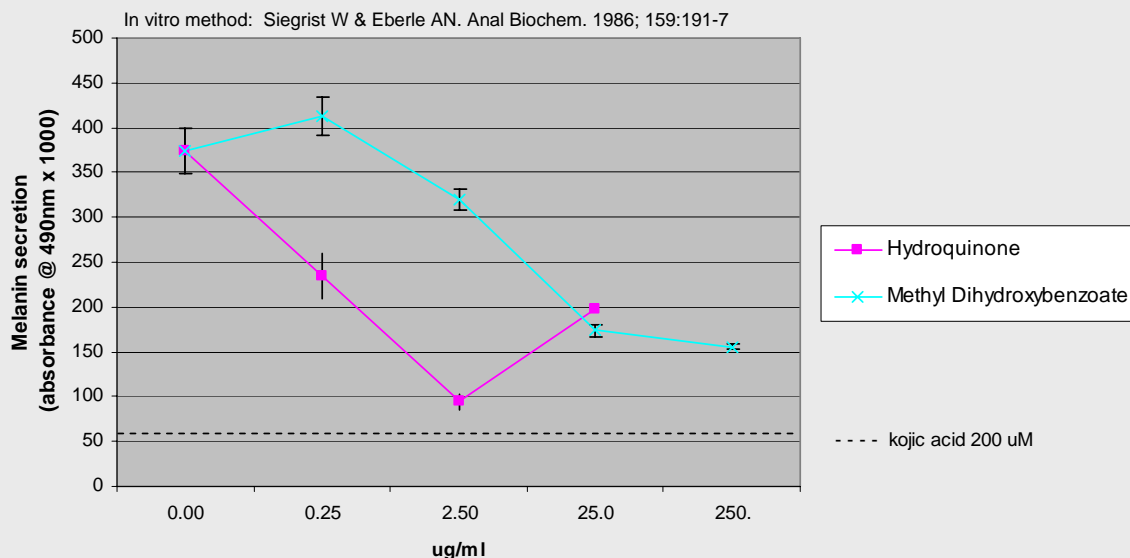
Methyl Dihydroxybenzoate



Pro-liposome Delivery

- Effective ingredient for evening out skin tone and skin lightening formulations
- Synthetic origin
- Less cytotoxic than hydroquinone
- Chemically/color stable at pH < 6.0
- Pro-Liposome for effective delivery, forms liposomal bi-layers upon emulsification
- Non-irritating and non-sensitizing phospholipids delivery system

Quantification of the Effect of Hydroquinone and Methyl Dihydroxybenzoate on Melanin Secretion by Melanocytes



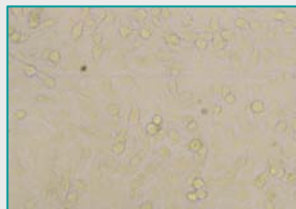
DC Skin Bright AF

Tyrosinase inhibitor in a pro-liposome delivery for skin brightening products

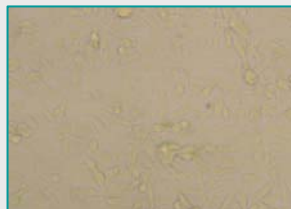
In vitro photographic documentation of human melanocytes



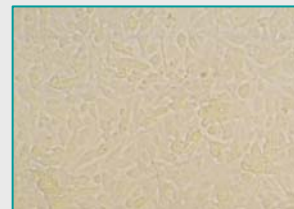
Control melanocytes



Hydroquinone-treated melanocytes



Kojic acid-treated melanocytes



Methyl Dihydroxybenzoate - treated melanocytes

Skin Bright Radiant Cream RON3-165/2

Phase	Ingredient	%	Supplier
A	Water	QS	
A	Disodium EDTA	0.05	
A	Keltrol CG	0.20	Kelco
A	Butylene Glycol	2.00	
A	Ultrez 10	0.15	Noveon
B	Arlacel 165	2.50	Uniquema
B	Promulgen D	2.50	Chemron
B	Ceraphyl 368	3.00	ISP
B	Finsolv TN	3.00	Finetex
B	Oxydex ST	0.20	Rona
B	Dimethicone 100 cst	2.00	
C	Diocide	1.00	DIOW
D	TEA 99%	0.15	
D	Water	1.85	
E	DC Skin Bright AF	5.00	RON/Distinctive Cosmetic Ingredients, LLC
E	Sepigel 305	0.50	Seppic

Procedure:

Combine Phase B in a separate vessel and mix while heating to ~85°C until melted and dissolved.

Add Water and EDTA into the main beaker and heat to ~85°C while homogenizing until uniform.

Combine Phase B into A and homogenize for ~15 minutes at ~85°C until uniform.

Remove from the heat and switch to side-sweep mixing and cool to ~50°C

Skin Bright AF INCI Name:

Butylene Glycol (and) Methyl Dihydroxybenzoate (and) Polyethylene (and) Water (and) Glycerin (and) Phospholipids

Other References:

Inhibitors of mammalian melanocyte tyrosinase: in vitro comparisons of alkyl esters of gentisic acid with other putative inhibitors. Curto EV, Kwong C, Hermersdorfer H, Glatt H, Santis C, Virador V, Hearing VJ Jr, Dooley TP. Southern Research Institute, Birmingham, AL 35205, USA.

Distinctive Cosmetic Ingredients, LLC

2259 South Clinton Avenue, South Plainfield, NJ 07080

Tel. (908) 226-5123 Fax. (908) 226-1514

www.dcingredients.com