



PharmaClinix[®]

Advanced Cosmeceuticals

- **Fast acting**
- **Complex formulations**
- **Clinically proven ingredients**
- **Economical price**

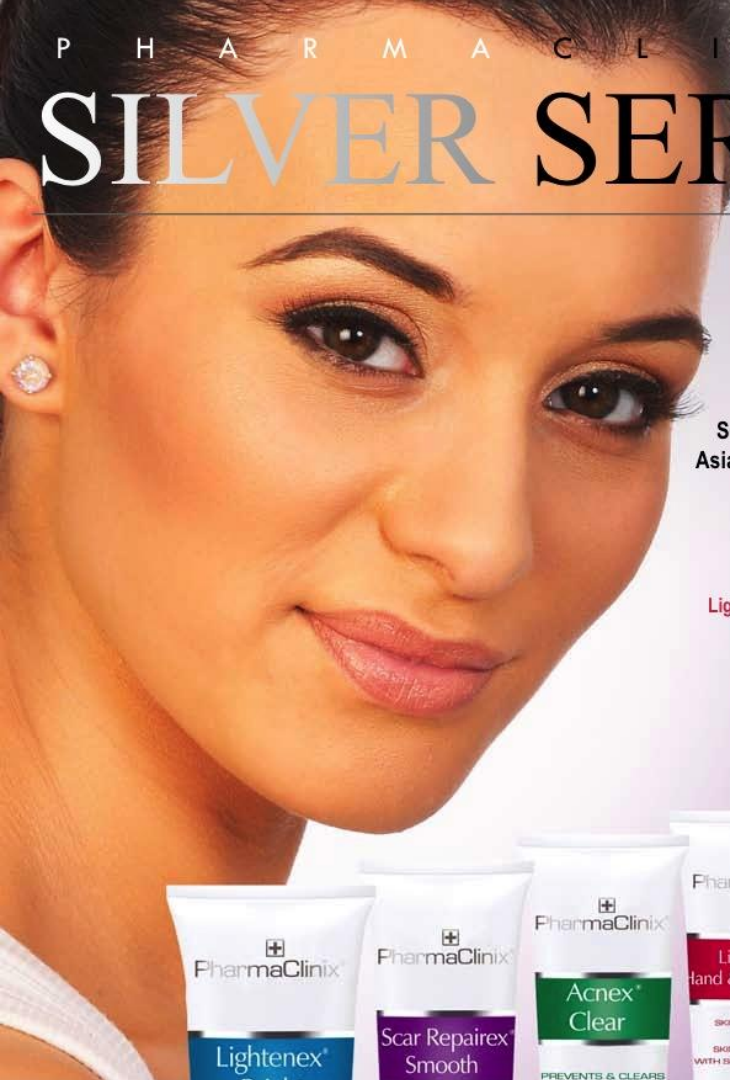


UK's top selling Professional Skincare

PharmaClinix Ltd, 130 Bramley Road, Kensington, London, W10 6TJ, UK

P H A R M A C L I N I X

SILVER SERIES



Pharmaclinix®
Scientifically designed for
Asian and Darker skin tones

- Lightenex®Bright
- Scar Repairex®Smooth
- Acnex®Clear
- Lightenex®Hand & Foot Cream
- Sun Blockex®Max



Clinically Tested and Produced in the E.U.

PharmaClinix Ltd
130 Bramley Road,
Kensington
London,
W10 6TJ
United Kingdom
pharmaclinix.com



PharmaClinix®
Advanced Cosmeceuticals

LIGHTENEX® BRIGHT

SCAR REPAIREX® SMOOTH

LIGHTENEX® HAND & FOOT INTENSE

ACNEX® CLEAR

SUN BLOCKEX® MAX SPF 50





PharmaClinix[®]
Advanced Cosmeceuticals

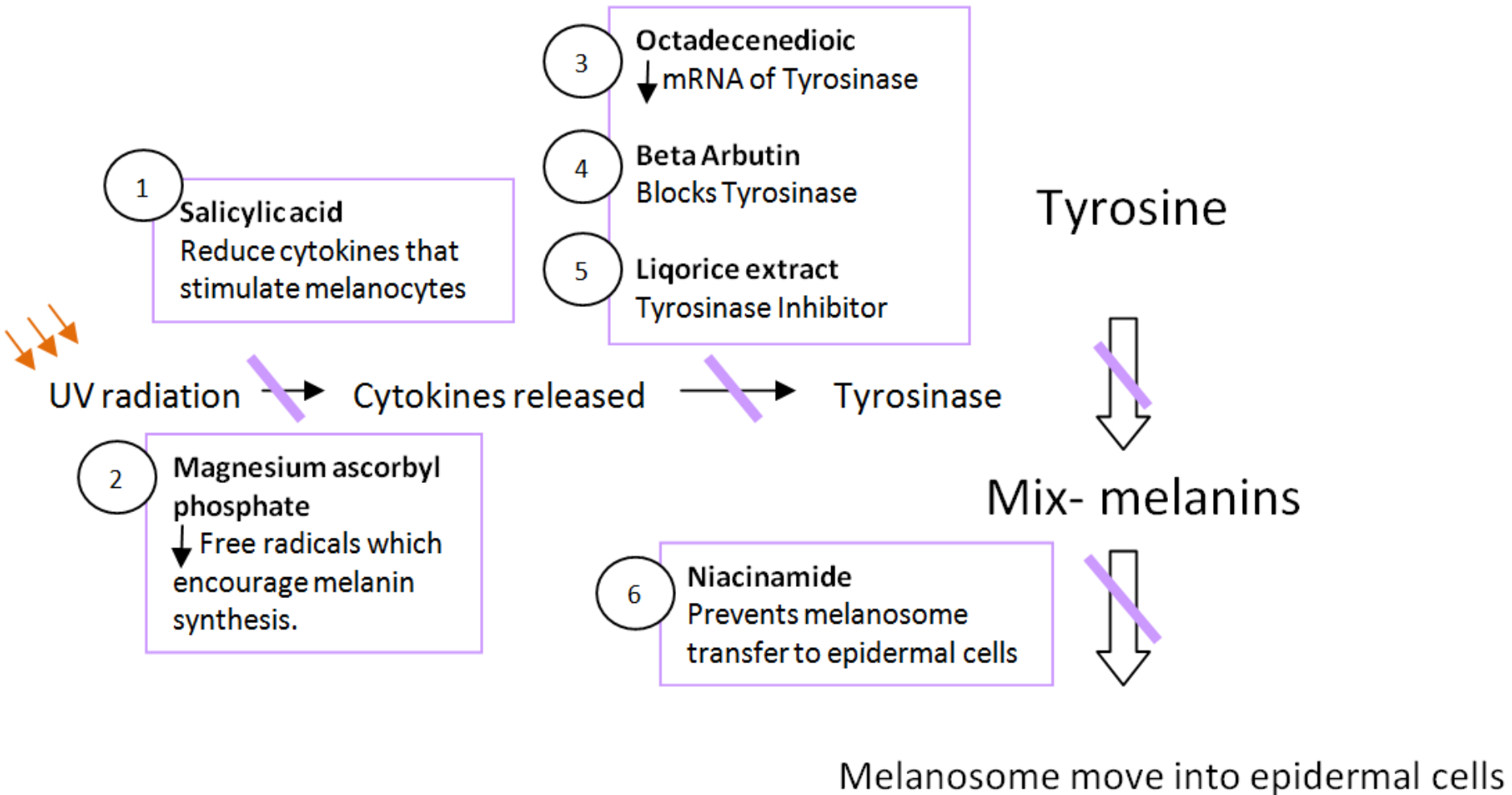
Lightenex[®] Bright

INGREDIENTS:

1. Beta Arbutin 2%
2. Octadecene-dioic 2% (Dioic acid)
3. Niacinamide 4% (Nicotinamide)
4. Magnesium ascorbyl phosphate 2%
5. Licorice extract 2%
6. Salicylic acid 2%



The Science behind Lightenex® Bright





PharmaClinix[®]
Advanced Cosmeceuticals

Lightenex[®] Bright

- **Beta Arbutin 2%** - Blocks rate limiting enzyme Tyrosinase to reduce Melanin synthesis.
- **Octadecene-dioic (Dioic acid) 2%** - Di-Carboxylic acid like azelaic acid prevents synthesis of mRNA of the enzyme tyrosinase. Most effective in melasma & post inflammatory hyperpigmentation.
- **Niacinamide 4%** - Prevents transfer of melanosomes from melanocytes to epidermal keratinocytes.
- **Magnesium ascorbyl phosphate 2%** - Excellent water soluble Vitamin C prevents the generation of free radicals which are instrumental in encouraging melanin synthesis.
- **Liquorice extract 2%** - Tyrosinase Inhibitor reducing melanin synthesis.
- **Salicylic acid 2%** - Mild keratolytic & anti-inflammatory agent reducing trigger chemicals that stimulate melanocytes to make melanin.



How it works

Tyrosinase is the key rate limiting enzymes which acts on two stages of melanin synthesis.

- Beta arbutin, Dioic acid, Liqorice extract & Magnesium ascorbyl phosphate (MAP) all *reduce* the activity of tyrosinase.
- Niacinamide works after the making of melanin & prevents its transfer from melanocytes which are deep in the epidermis to keratinocytes.



Indications for Lightenex® Bright:

- Epidermal pigmentation (woods lamp positive).
- For depigmentation therapy of the epidermis before laser treatment of deep dermal pigmentation.
- Superficial melasma and maintenance after intermediate chemical peel.



Directions:

- Step 1** Wash the area to be treated. Exfoliate with a gentle face scrub.
- Step 2** Massage cream into the skin until fully absorbed (apply twice daily).
- Step 3** Apply Sun Blockex® Max SPF 50, ten minutes after applying the Lightenex® Bright cream.

How quickly does Lightenex® Bright work?

- **4-6 weeks** are required to see the first benefit.

i.e. The time taken for epidermal cells to travel to the surface and be shed.

Better results are achieved with continued use



PharmaClinix®
Advanced Cosmeceuticals

Clinical Evidence for Lightenex® Bright

INGREDIENTS:

1. Niacinamide 4% **[6]**
2. Octadecenedioic 2% **[2, 3,4]**
3. Beta Arbutin 2% **[1]**
4. Magnesium ascorbyl phosphate 2% **[5]**
5. Licorice extract 2%





Niacinamide

A 138 (one hundred and thirty eight) subject clinical trial using 5% and 2% Niacinamide as well as detailed in-vitro studies showed:

- Niacinamide gave **35-68% inhibition of Melanosome** transfer in the co-culture (melanocyte/keratinocyte) model
- Niacinamide significantly:
 - Decreased hyperpigmentation
 - Increased skin lightness(compared with vehicle alone after 4 weeks of use).

Reference (6) : Hakozi, T., Minwalla, L., Zhuang, J., Chhoa M., Matsubara, A., Miyamoto, K., Greatens A., Hillebrand, G., Bissett D, and Boissy, R. (2002), The effect of Niacinamide on reducing cutaneous pigmentation and suppression of Melanosome transfer. *British Journal of Dermatology*, 147:20-31. doi:10.1046/j.1365-2133.2002.04834.x



Octadecenedioic 2% (Dioic acid) (Study 4)

An open comparative study of ninety six (96 female) Melasma patients in a 12 week study between:

Dioic Acid 1% & Hydroquinone 2% showed:

- more pruritus with hydroquinone
- Dioic acid as effective as Hydroquinone

Dioic acid 2% (study1)

A twenty patient placebo study on patients of Indian and Pakistani origin given Dioic acid 2% over 8 weeks showed:

- A significant **reduction in melanin** ($p < 0.025$) measured both by chromameter & mexameter.

Dioic acid 2% (Study 2)

In-vitro studies using Dioic acid 2% in melanoma cells showed:

It binds to PPAR -gamma receptors on melanocytes to:

- Reduce Tyrosinase mRNA production by **54%**
- Reduce tyrosinase production by **52%**
- Reduce melanin synthesis by **46%**

Int Journ of Cosmetic Science-2005,27,123-132.Anew mechanism of action for Skin Whitening agents:binding to PPAR.J W Weichers,A V Rawlings,C Garcia,C Chesne,P Balaguer,J C Nicholas, Corre&M D Gilbert.Uniqema Skin R&D,Gouda,The Netherlands.A V R Consulting Ltd,26 Shavington way,Northwich,Cheshire,UK.Endocrinologie Moleculaire et Cellulaire des Cancers,Montpellier,France.Lab Genetique et Developpement,CNRS UMR6061,Faculty of Medicine,University of Rennes,1-2 Leon Bernard Avenue,35043 Rennes ,France.

Beta Arbutin (Study 1)

In vitro studies of human melanocytes exposed to Arbutin at concentrations below 300 µg/mL reported **decreased** tyrosinase activity and melanin content.

- Beta Arbutin is a glycosalated hydroquinone and directly competitively inhibits Tyrosinase &
- Beta Arbutin is slowly hydrolyzed by skin organisms to Hydroquinone which lightens the skin.

Inhibitory effects of arbutin-β-glycosides synthesized from enzymatic transglycosylation for melanogenesis, [Biotechnology Letters](#) , [Volume 30, Number 4](#), 743-748, DOI: 10.1007/s10529-007-9605-1. [So-Young Jun](#), [Kyung-Min Park](#), [Ki-Won Choi](#), [Min Kyung Jang](#), [Hwan Yul Kang](#), [Sang-Hyeon Lee](#), [Kwan-Hwa Park](#) and [Jaeho Cha](#)

[J Cosmet Dermatol](#). 2008 Sep;7(3):189-93. Hydrolysis of arbutin to hydroquinone by human skin bacteria and its effect on antioxidant activity. [Bang SH](#), [Han SJ](#), [Kim DH](#).



Magnesium Ascorbyl Phosphate (Study 5)

A Clinical Study using Magnesium Ascorbyl Phosphate 2% on a total of 34 patients with chloasma or senile freckles showed the lightening effect to be *significant* on 19 of the 34 patients.

- In addition 1.6% of the cream remained in the epidermis 48 hours after application.

Inhibitory effect of Magnesium ascorbyl phosphate on Melanogenesis in vitro and in vivo. Journal of American Academy of Dermatology.1996 Jan;34(1):29-33.Kameyama K,Sakai C,Kondoh K,Nishiyama S,Tagawa M,MurataT,Ohnuma T,Quigley J,Dorsky A,BucksD,Blanock K.Det of Dermatology,Kitasato University School of Medicine,Sagamihara,Japan.

Liquorice Extract

Glabridin is a component of Liquorice Extract.

This study investigated inhibitory effects of Glabridin on melanogenesis and inflammation.

The results indicated that Glabridin:

- Inhibits tyrosinase activity of melanoma cells at concentrations of 0.1 to 1.0 microg/ml
- Decreased specifically the activities of T1 and T3 tyrosinase isozymes.
- UVB-induced pigmentation and erythema in the skins were inhibited.

In an Independent study of 50 volunteers with woods lamp positive (Epidermal only) hyperpigmentation between the ages of 32-66, LIGHTENEX® BRIGHT was applied twice daily for period of 8 weeks. This test was conducted on face & torso (decollagete) skin.

The tests showed:

- Absence of redness or peeling
- Was well absorbed
- 68% of volunteers felt a SIGNIFICANT improvement whereas 32% felt average improvement in hyper-pigmentation
- Average measurable reduction of melanin of 40% (Mexameter 18)
- 56% of volunteers felt the product was VERY GOOD. 24% (12) felt it was the same as the ones upto now. 8 (16%) felt it was GOOD and 2 felt no change.




PharmaClinix[®]
Advanced Cosmeceuticals

Conclusion

Lightenex[®] Bright
Works

www.pharmaclinix.com