ProteXadine: Functional Cosmetics for UV Protection and UV Damage Repair

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UV Protection and Damage Repair with Anti-aging Benefits

A functional cosmetic portfolio offers UV protection, UV damage repair and anti-aging benefits for the skin. The compounds, ProteXadine, mimic the skin’s natural responses upon exposure to UV light and not only protect DNA from UV damage but also stimulate the body’s natural defense mechanisms by activating DNA repair enzymes, the “first steps” of DNA damage repair pathway. In addition, the photoproducts of these compounds are non-toxic.

Boosts DNA Repair Enzymes

Excessive exposure to the sun increases skin cancer risk and can cause premature aging of the skin, increased epidermal thickness and changes in collagen structure. Current products offer some help, but have several disadvantages. For example, DNA repair cosmetics are generally large molecular weight protein structures known for low stability and poor absorption. Such enzyme-based products do not stimulate production of key repair enzymes. They help only in late-stage repair mechanisms and require expensive formulations to increase efficacy and stability. In addition, active ingredients in most sunscreens absorb light upon UV exposure but can generate very reactive intermediates (free radicals), which can be absorbed by the epidermis and may cause unwanted allergic reactions or sunburns. These new compounds prevent such negative traits by both filtering out damaging UV rays as well as boosting the proportion of key DNA repair enzymes in the skin.

BENEFITS AND FEATURES:

• Photoprotection

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• Skin anti-aging
• Non toxic
• Natural stimulation of DNA repair enzymes
• Protects DNA from UV damage
• Self-dimerization
• UV-B protection
• Reverse damage and oxidative stress caused by UV exposure
• Maintains the epidermis and collagen structure and levels in the skin

APPLICATIONS:

• After sun care products
• Anti-aging technology
• Anti-wrinkle creams
• Bathing product lines
• Cosmetics
• DNA repair-based treatment formulations
• Functional cosmetic ingredients
• Cosmeceuticals
• Maintenance of epidermal layer and collagen amounts and structure
• Novel anti-photoaging products
• Personal care products
• UV protection
• Skin cancer protection
• Sun cosmetics
• Sunscreens
• UV/UV-B absorbers
• Vitiligo, xeroderma pigmentosum, polymorphic light eruption (PMLE) and other hypopigmentation disorders


Interested in Licensing?
The University relies on industry partners to scale up technologies to large enough production capacity for commercial purposes. The license is available for this technology and would be for the sale, manufacture or use of...

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products claimed by the issued patents. Please contact Kevin Anderson to share your business needs and technical interest in this technology and if you are interested in licensing the technology for further research and development.

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