

protects DNA against UV damage
Phlorotannins
 stimulates DNA repair in skin cells

DermalRx FSE

a marine ferment of *Sargassum vulgare* extract rich in bioactive phlorotannins

Our skin, especially on exposed areas of the face and hands, experiences frequent exposure to sunlight and other environmental threats that damage DNA. These high rates of DNA damage compromise skin cell function and threaten the healthy, youthful appearance of the skin. DermalRx® FSE, a ferment of marine-derived *Sargassum vulgare*, is rich in bioactive phlorotannins that rejuvenate and protect through the stimulation of the skin's natural nucleotide excision repair (NER) process for DNA repair. At the same time, DermalRx FSE delivers strong anti-pollution activity by inhibiting oxidation and inflammation while modulating expression of 21 genes that are critical for skin health at the molecular level. With potent biological activity, DermalRx FSE is an ideal candidate for any protection or repair product.

DermalRx® FSE
 Product ID – R10111
 Suggested Use Level – 0.5% - 2.0%
 Water (and) *Sargassum Vulgare* Extract (and) Saccharomyces Ferment Filtrate

Applications

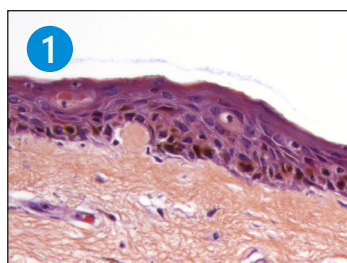
- De-stressing anti-aging regimes to enhance natural skin repair.
- Anti-aging regimes targeting oxidative and inflammatory damage (caused by pollution, UV radiation, etc.).
- Day creams and pre/post-sun products.



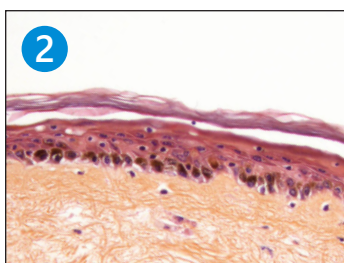
Sargassum vulgare

Sargassum vulgare is a brown macroalgae that grows as large, free-floating mats in the vast Sargasso Sea of the North Atlantic. Thriving at the water's surface in these tropical areas, *S. vulgare* is constantly exposed to intense, DNA-damaging UV radiation from sunlight. To counter this severe stress, the algae contains high levels of phlorotannins.

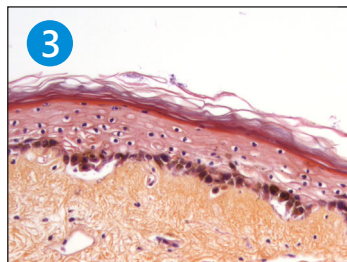
DermalRx® FSE Stimulates DNA Repair



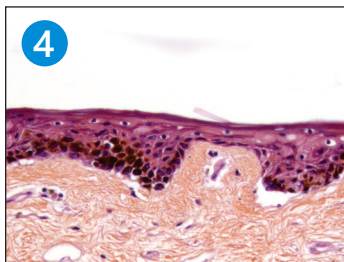
untreated / no UV irradiation



DermalRx® FSE treated / no UV irradiation



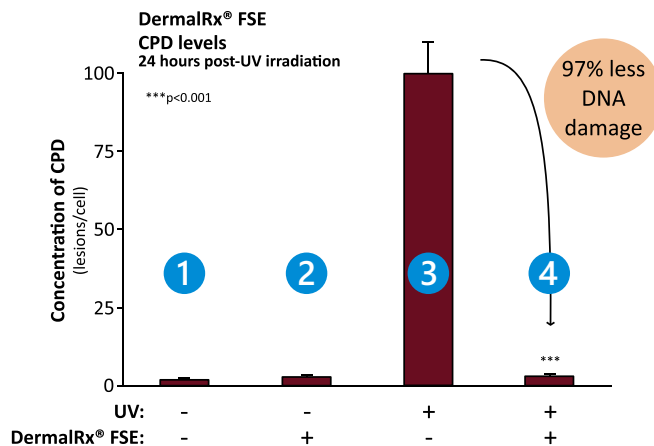
untreated / UV-irradiated



DermalRx® FSE treated / UV-irradiated

The gross tissue morphology of the skin was well preserved by DermalRx® FSE treatment as observed post-UV exposure.

DermalRx® FSE stimulates tissue repair and completely eliminates CPD lesions within 24 hours of UV exposure of human skin explants.



Tissues treated with DermalRx® FSE had 97% less DNA damage than untreated tissues 24 hours after UV exposure.