

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 HH, 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 HH 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 HH is an ideal candidate for any protection or repair product.

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

## DermalRx® FSE HH

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

### DermalRx® FSE HH

Product ID – R10133

Suggested Use Level – 0.5% - 2.0%

Water (and) Sargassum Vulgare Extract (and) Saccharomyces Ferment Filtrate  
(and) 1,2-Hexanediol (and) Hydroxyacetophenone

### Applications

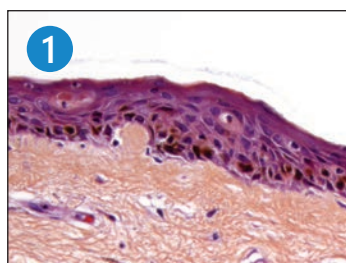
- De-stressing anti-aging regimes to enhance natural skin repair.
- Anti-aging regimes targeting oxidative and inflammatory damage (caused by pollution, UV radiation, etc.).
- Day creams and pre/post-sun products.



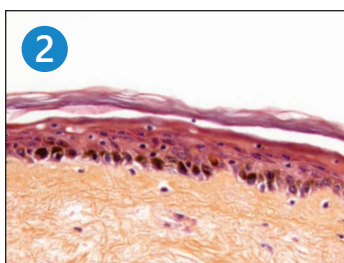
### *Sargassum vulgare*

*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.

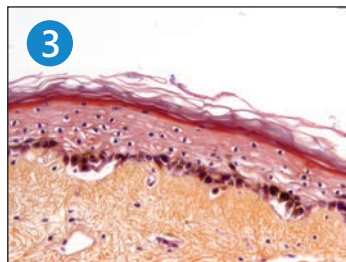
## DermalRx® FSE HH Stimulates DNA Repair



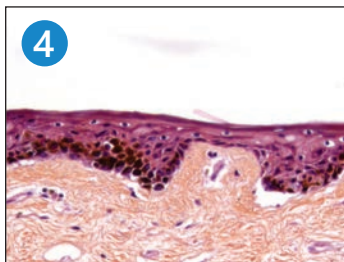
untreated / no UV irradiation



DermalRx® FSE HH treated / no UV irradiation



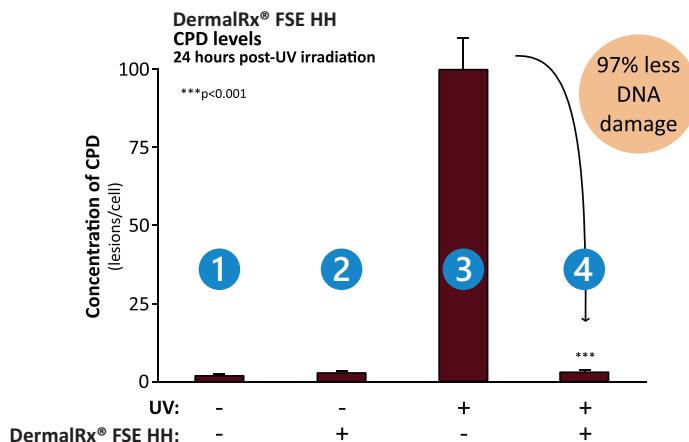
untreated / UV-irradiated



DermalRx® FSE HH treated / UV-irradiated

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

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



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