

Minermang

Product Name: Minermang

Plant Name: Kombu Kelp

INCI name: Laminaria Digitata Extract **Scientific name:** Laminaria Digitata

Kombu Kelp



Kombu Kelp (*Laminaria Digitata*), also known as oarweed, is a brown algae native to the Atlantic Ocean near northwards hemisphere- from Russia and Iceland to France and from Greenland to cape cod.

They grow in dense kelp beds, attached to rocky seabeds using tough, root-like holdfasts. Kombu Kelp's fronds are flat and split into finger-like sections, often remembling a hand. The stipe is very flexible, allowing it to bend right over on very low tides and stop the fronds from drying out. It also allows it to survive rough and stormy conditions.

It is the most commonly found species and can be considered as highly dominant. Due to its shape like thick ribbons, it is also called sea-tangles.

References:

- https://www.lesielle.com/int/en/laminaria-digitata-extract-886
- https://www.wildlifetrusts.org/wildlife-explorer/marine/seaweeds-and-seagrass/oarweed



For Medicine

Laminaria contains iodine, an element that the body needs to make thyroid hormones. It is also a rich source of iron and potassium. Some people use laminaria as medicine.

Other Uses

Laminaria is used for weight loss, high blood pressure, as a bulk laxative for constipation, and for treating radiation sickness. It is also used for preventing cancer.

Sometimes healthcare providers use laminaria to expand the cervix, the mouth of the uterus, before certain medical procedures.



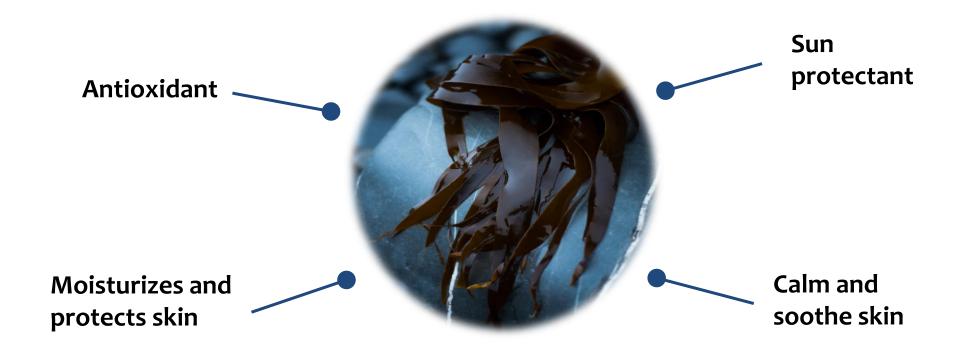
Reference: https://www.rxlist.com/laminaria/supplements.htmwildlifetrusts



Kombu Kelp on skin

Minermang

Kombu Kelp contains proteins, peptides, amino acids, essential fatty acids, minerals, and vitamins that can help hydrate, soothe, and protect the skin.



References:

- https://www.skincarelab.org/laminaria-digitata-extract/
- Ozanne, H., Toumi, H., Roubinet, B., Landemarre, L., Lespessailles, E., Daniellou, R., & Cesaro, A. (2020). Laminarin effects, a β-(1, 3)-Glucan, on skin cell inflammation and oxidation. Cosmetics, 7(3), 66.



Multi Efficacy Product





Anti-inflammatory effects of Minermang

Minermang

57.6%

According to efficacy evaluation result, Minermang showed anti-inflammatory efficacy by inhibiting Nitric Oxide (NO) synthesis.

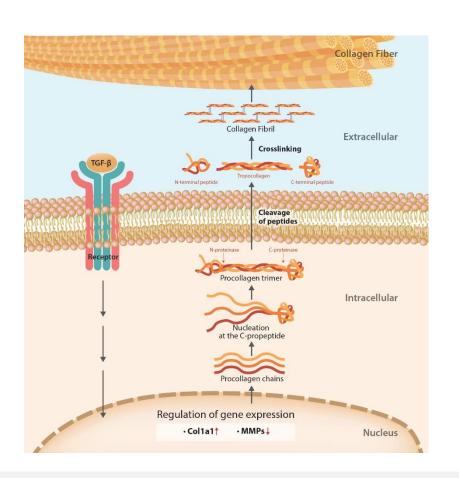
Stimulus NO Synthesis Inhibition (in vitro) IL-1β, TNF-α, INF-γ ↑ 100 NO production (% of control) PG synthesis, TNF-a, IL-2, IL-6, IL-8 LPS only **Activation** 0.5 (+) LPS (1 µg/mL) Blank Concentration (%, v/v) in test medium Inflammation



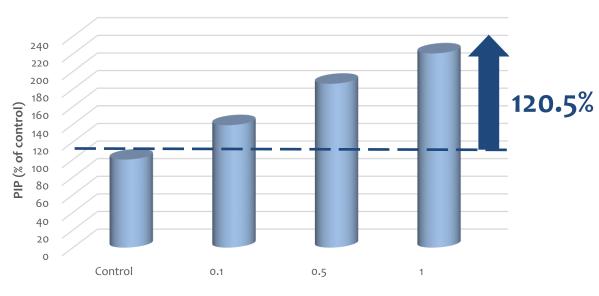
Anti-wrinkle effects of Minermang

Minermang

Skin aging reduces skin tissue elasticity and balance through collagen and elastin degradation, which are skin proteins, and induces skin wrinkles. It promotes collagen production in the skin, prevents and prevents skin aging. Minermang showed anti-wrinkle efficacy by activating procollagen type I peptide synthesis.



Procollagen type I peptide Synthesis Activity (In vitro)



Concentration (mg/mL) in test medium



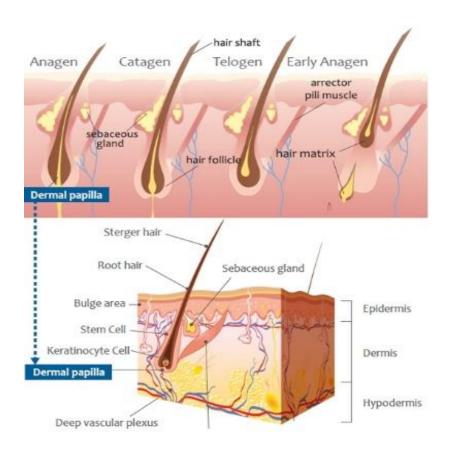
Hair growth effects of Minermang

Minermang

Human hair growth has a unique repetitive cycle composed of the anagen, catagen, telogen phases, and early anagen. And in this hair growth, Human Dermal Papilla (HDP) cells play a critical role in regulating hair follicle development and period regeneration. Therefore, this cycle clearly shows the importance of hair cell regeneration, which is the fundamental method to restore lost hair cells. Minermang was shown to have excellent hair-growth efficacy by increasing hair cells.

Control

0.1



11.9% 1100 80 80 80 80 80 20

0.5

Concentration (mg/mL) in test medium

Hair Cell Proliferation (in vitro)

Summary

ANTI-INFLAMMATION

ANTI-WRINKLE

HAIR GROWTH





Product Information

• Product Name: Minermang

• INCI name : Laminaria Digitata Extract

• IECIC 2015: LAMINARIA DIGITATA EXTRACT

• **CAS No.:** 90046-12-1

• EINECS / ELINCS No.: 289-980-0

• **Dosage:** 1-3%

• Formulation : Add to the formulation

when the temperature is lower than 55°C.

Recommended to add after the cooling process

• **Storage**: Avoid direct light or UV.

Keep it in a cool and dry area.

• Efficacy: Anti-inflammation, Anti-wrinkle and Hair growth effects











