

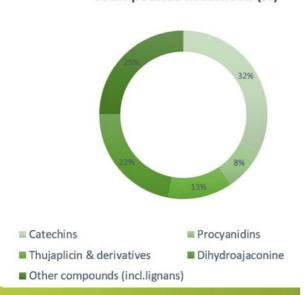
Anti-ageing and skin protecting activity.

INCI: Glycerin (and) water (and) *Juniperus communis* callus culture extract

About The Plant

JuniCell is a *Juniperus communis* plant stem cell extract. Juniper stem cell line was established from young spring shoots that are especially rich in bioactive compounds but in nature are produced only for a limited period of time during season. Stem cells of juniper contain high concentrations of catechins, gallocatechins and procyanidins, that contribute to specific biological activities. JuniCell has strong anti-ageing and skin protecting activity.

JuniCell: Chemical composition Coumpounds in JuniCell (%)



Juniperus communis, one of the Earth's ancient botanical treasures, thrives across the Northern Hemisphere, recognizable by its fragrant bluegreen needles and petite berry-like cones. Culinary and herbal traditions have long celebrated its essential oils, flavoring beverages, and offering potential health benefits. This plant is experiencing overexploitation, therefore we, by utilizing only its cells, have found its sustainable role in cosmetics. By utilizing only its cells, we align with environmental preservation, reducing the plant's burden while delivering the plant's timetested benefits to skincare formulations.

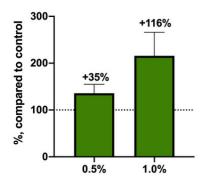




JuniCell acts towards various mechanisms:

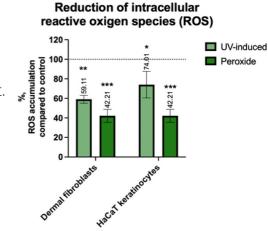
- Promotes collagen production;
- Protects skin keratinocytes from negative effects caused by ultraviolet light induced damages;
- Alleviates skin inflammation caused by environmental stress;
- Reduces accumulation of senescence markers and reverses cellular ageing.

Changes in expression of collagen I

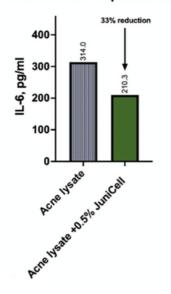


Even at concentrations as low as **0.5%** JuniCell promotes collagen **expression** in dermal fibroblasts.

JuniCell protects skin keratinocytes from negative effects caused by ultraviolet light. 0.5% (v/v) extract reduces UV and peroxide induced oxidative stress in skin cells (ROS quantified by flow cytometry)



Reduction of IL-6 production (4h)



Anti-inflammatory activity: 33% reduction of IL-6 release from HaCaT keratinocytes stimulated by bacterial lysate.

Reduces accumulation of senescence marker beta-galactosidase in dermal fibroblasts after UV-induced ageing (senescence marker quantified by flow cytometry).

Recommended use level: 0.5-1.5%

Reversal of cellular senescence 5000 4000

