

Anti-inflammatory

Antioxidant

Collagen

INCI: Glycerin (and) Water (and) Lactobacillus Ferment (and) Artemisia vulgaris Cell Culture Extract

About

ArtiCell is an active extract derived from biotechnologically propagated *Artemisia vulgaris* (mugwort) cell culture. The cell line has been optimised to produce a synergistic blend of anti-inflammatory compounds that target inflammation; the chronic, environmentally enhanced inflammation associated with skin ageing.

Key benefits of ArtiCell

- **Strong antioxidant & anti-inflammatory activity.** ArtiCell neutralises free radicals generated by UV, pollution and inflammation. Its compounds act at several points of the inflammatory damage loop at once, so each one weakens the cycle where the others don't.
- **Double collagen protection.** It targets dermal ageing on two fronts: it inhibits collagen-degrading enzymes and blocks the formation of advanced glycation end products (AGEs), which stiffen collagen fibres and stop their natural renewal.
- **Two-step soothing activity.** Dicafeoylquinic acids neutralise ROS and boost the skin's own antioxidant defences, while companion compounds slow the activation of inflammatory pathways.

In vivo data

- **Gentle by nature.** Excellent skin tolerance was confirmed in a 50-volunteer study, so ArtiCell is suitable for sensitive skin.

Nature's Synergy Strategy

In mugwort, secondary metabolites work together and form a sophisticated natural defence network against environmental stress:

- **Flavonoids**
- **Caffeoylquinic acids**
- **Pinoresinol glucoside**

Rather than acting alone, these compounds reinforce one another to build resilience.



Artemisia vulgaris: the resilient mugwort plant, whose synergistic defence network protects it against environmental stress

Compound	Key bioactivities
Pinoresinol glucoside	Strong antioxidant · Anti-inflammatory activity · Barrier support
Dicaffeoylquinic acids	Strong antioxidant · Protects collagen from UV induced degradation · Anti-glycation activity
Chlorogenic acid	Antioxidant · Anti-inflammatory · Collagen protection
Apigenin	Anti-inflammatory · Soothing · Collagen protecting
Luteolin	Anti-inflammatory · Anti-glycation · Collagen protection

Why ArtiCell™ Matters in Skincare Innovation

ArtiCell™ enables next-generation formulations for:

Anti-inflammaging care. **Skin longevity & resilience** **Sensitive skin** **Collagen protection**

Product	ArtiCell <i>INCI: Glycerin (and) water (and) Lactobacillus ferment (and) Artemisia vulgaris cell culture extract</i>
Key compounds:	Pinoresinol glucoside, Dicaffeoylquinic acids, Chlorogenic acid, Apigenin, Luteolin
Efficacy data	Anti-oxidant, anti-inflammatory, Collagen protecting.
Appearance	Slightly opalescent, light brown to light yellowish solution. Formation of small amounts of precipitate might be observed and does not affect product quality.
Odour	Characteristic
pH	6.0 ± 1 at room temperature (22... 25 oC)
Solubility	Water soluble
Density	1.05 – 1.20 g/l at room temperature (22... 25 oC)
Total phenolic content	>400 µg/ml gallic acid equivalents (Folin-Ciocalteu method)
Solubility	Water soluble
Recommended concentration for use in cosmetic products	0.5 – 2.0 %
Shelf life and storage conditions	12 months Store at room temperature, protect from light.
Minimal order quantity	1 kg