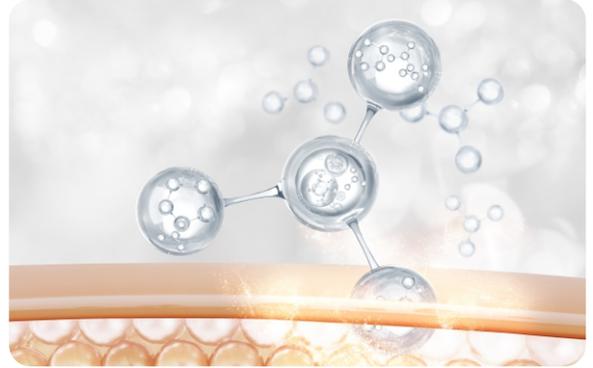


Phosphatidyl serine (PS)

BIOTECH EDGE

Powered by **biotechnological precision**, Phosphatidylserine enhances skin's cellular intelligence, guiding each cell to repair, regenerate, and **defend against environmental and oxidative stress**. Its **bioactive lipid system strengthens collagen, restores barrier function**, and promotes resilience, transforming advanced molecular science into visible firmness, clarity, and stress-proof beauty.



Phosphatidylserine (PS) is a naturally occurring phospholipid found in all living cell membranes, where it **plays a vital role in cell communication, regeneration, and stress response**. In skincare, PS is recognized as a bioactive ingredient that helps protect the skin from environmental and oxidative stress, both of which **contribute to premature aging**. In biocosmetics, PS is **valued for its cell-revitalizing and photoprotective properties**. It helps maintain skin firmness by supporting natural collagen production, reduces signs of aging such as fine lines and loss of elasticity, calms skin sensitivity, and promotes a smoother, more resilient complexion.

PRODUCT DETAILS

INCI name:
Phosphatidylserine

Recommended Dosage:
0.5–3%

Appearance:
**Pale beige to yellowish
viscous lipid or powder**

APPLICATIONS :



Anti-ageing & firming
creams and serums



Photo-protective and
after-sun formulations



Hydrating and
replenishing mist



Barrier-repair and
recovery skincare



Stress-defence &
anti-pollution products



Biotech or dermo-cosmetic
night repair lines

KEY FEATURES :

- Bioidentical lipid that supports cellular renewal and membrane stability
- Acts as a skin stress modulator, enhancing resilience to UV and pollution
- Collagen-protective and anti-inflammatory properties backed by in-vitro and in-vivo data
- Suitable for sensitive and mature skin, with excellent biocompatibility
- Sourced from biotechnological or plant-based origins for clean formulation positioning

WHAT IT BRINGS TO YOUR FORMULATION :

- Adds a biotech anti-stress and anti-photoageing edge to your formulation.
- Strengthens collagen and enhances elasticity for visibly firmer, more youthful looking skin.
- Ideal for premium “urban ageing” or “stress-defence skincare” concepts.
- Compatible with antioxidants, ceramides, and peptides for synergistic repair effects.

EFFICACY STUDIES :

Anti-aging and UV protection

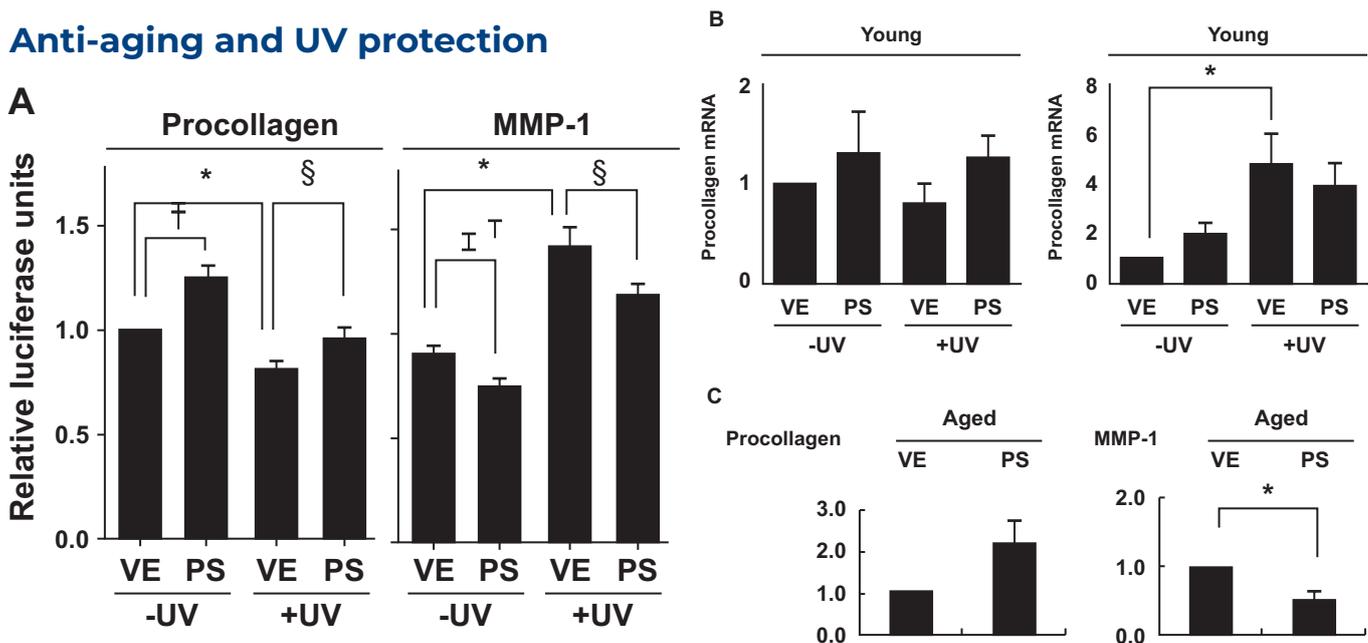


Fig 1: [A] Phosphatidylserine (PS) protects skin cells (in vitro) from UV damage by maintaining collagen production (procollagen) & reducing MMP-1 levels to prevent collagen breakdown. [B & C] This protective effect is evident in both younger and aged skin types (ex vivo) as assessed through quantitative RT-PCR [1].

PROVEN BENEFITS :

- Promotes collagen synthesis in normal and UV stressed skin
- Protects against ageing and UV induced collagen degradation.
- Effectively displays in both younger and aged skin types.
- Displays anti-inflammatory property by modulating the levels of inflammatory cytokines.

References:

[1] Cho, Soyun, et al. "Phosphatidylserine prevents UV-induced decrease of type I procollagen and increase of MMP-1 in dermal fibroblasts and human skin in vivo." *Journal of lipid research* 49:6 (2008):1235-1245.