A “chaperone” protein for high quality collagen

Lupin, an ornamental plant, has a wide range of cosmetic applications.

Laboratoires Expanscience—an expert in lupin exploitation and author of several patents on lupin oil and peptides—recently developed Collageneer®, a new active ingredient obtained using a completely original extraction process. Containing 4% lupeol, this oily extract is derived from Lupin seed coatings. It is preservative-free.

The Laboratoires Expanscience Research and Development Centre has demonstrated lupeol’s stimulatory effect on the synthesis of HSP47. Known as a chaperone, this protein plays an essential role in the correct assembly of procollagen $\alpha 1$ and $\alpha 2$ chains. It prevents chain agglomeration and degradation, and abnormal formation of the helices. Moreover, HSP47 plays a role in quality control by preventing the maturation of abnormal procollagen.
In vitro testing has shown that lupeol also stimulates overproduction of collagen I, the skin’s most abundant collagen, which diminishes with age (290% increase at 20 μg/ml).

Collageneer® thus improves both the quantity and quality of collagen. The impact of this is considerable, since only high quality collagen is effective in maintaining the skin's elasticity and firmness.

Clinical research recently validated this concept under conditions of actual use (2% active ingredient). It demonstrated a significant improvement in the elasticity of volunteers’ skin, as well as a significant reduction in facial sagging beginning at day 42 (with a 15.7% reduction in the relative volume of the facial contour after 89 days).