BIOTECHNOLOGY

FINE CHEMISTRY

VEGETAL EXTRACTION

Peptiskin®

By Solabia

SOLABIA Raw material

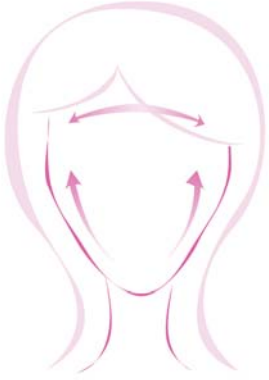
APPROVED ECOCERT

The Bio-Intelligent expertise

"Triple action"
Global anti-ageing peptide

REACT FACE TO INESCAPABLE AND SLOW DOWN THE TIME :
AN ACCESSIBLE DREAM !

- **1. BIO-REGENERATION OF EXTRACELLULAR MATRIX STRUCTURAL COMPONENTS (COLLAGEN I, III, V, GLYCOSAMINOGLYCANS)**
  - ► DECORIN STIMULATION FOR IMPROVING COLLAGEN NETWORK SHAPE
- **2. ANTI- COLLAGEN CROSS-LINKING ACTION : PEPTIDE « LURE OF SUGAR »**
- **3. COLLAGEN CHRONOLOGICAL AND ACTINIC PROTECTION (ANTI-MMP1)**



cosmetics Solabia USA

www.solabia.com

BIOTECHNOLOGY FINE CHEMISTRY VEGETAL EXTRACTION

Peptiskin®
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"Triple action"
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- Definition

PEPTISKIN® is a 40% dry extract solution (w/w) composed of L-lysine and L-arginine oligopeptides (degree of polymerization comprised between 2 and 7), obtained by a biotechnological enzymatic synthesis process without using any solvent.

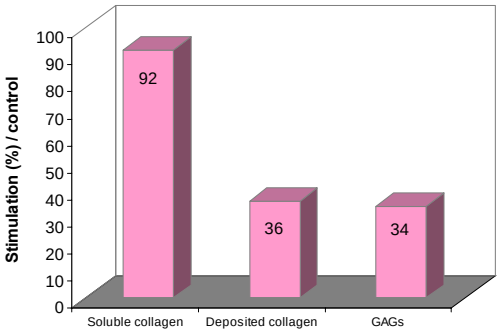
- CTFA name
  Arginine/Lysine polypeptide
- Preservative
  0.1 % sorbic acid
- Recommended dose
  1% - 3%

- **Performances** *(technical file available on request)*

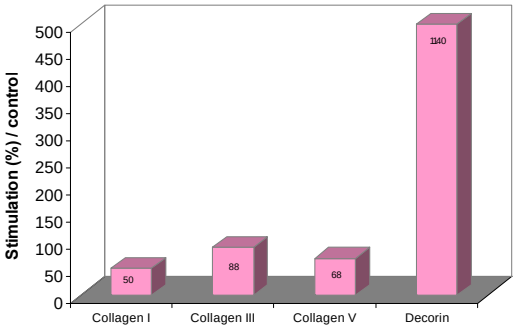
1- Stimulation of extracellular matrix structural component synthesis and deposit

In vitro study carried out on normal human dermic fibroblasts / Incubation during 72h with PEPTISKIN® at 0.4% vs Control / Synthesis : Add radioactive precursors of collagen and glycosaminoglycans (GAGs), synthesis quantification by radioactivity / Deposit : Immuno-labelling by specific fluorescent antibodies of collagens and decorin, observation by microscopy.

***Synthesis** : incorporation of ^{3}H-Prolin et de ^{3}H-Glucosamine*

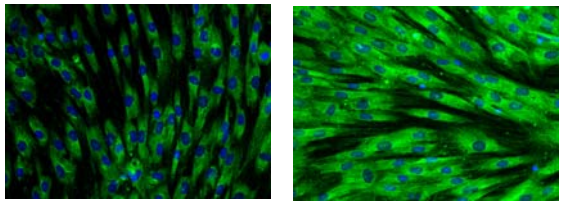


***Deposit** : immuno-labelling by specific fluorescent antibodies*



Collagen I : matrix structure and resistance
Collagen III : cutaneous restructuration and elasticity
Collagen V : regulation of I and III collagen fiber diameter
Decorin (proteoglycan) : collagen fiber formation and combination, matrix stabilization and flexibility

Decorin deposit visualization



Untreated control **Test with PEPTISKIN®**

Test with PEPTISKIN® at 0.4%

More than 1140 % increase !

2- Inhibition of anarchic collagen cross-linking

Proved *in vitro* by electrophoresis on polyacrylamide gel, in a denaturing condition on a model of Glucose + Collagen I +/- PEPTISKIN® (1.5 and 3%)

3- Inhibition of metalloproteinase 1 (MMP-1 collagenase) release

In vitro study on normal human dermic fibroblasts, incubated with PEPTISKIN® at 0.4% vs Control, stimulated or not by UVA / Quantification of released MMP-1 (Elisa kit).

- **- 53% of basal MMP-1 release (without UV induction)**
- **- 22% of UV induced MMP-1 release**