Egyfil

Alleviating Lotion

EGYFIL is an alleviating lotion for muscle and joint discomfort and stiffness. It contains two SIGMOLECS® Peptides and Hyaluronic Acid among other state-of-the-art active substances.

Ingredienti:
aqua, glycerin, caprylic/capric triglyceride, simmondsia chinensis seed oil, aloe barbadensis leaf juice powder, butyrospermum parkii butter, sodium hyaluronate, tocopherol, tocopheryl acetate, sorbitol, sigmolecs® sh-polypeptide-6, sigmolecs® sh-oligopeptide-1, ammonium acryloyldimethyltaurate/vp copolymer, carbomer, sodium hydroxide, ethylhexylglycerin, phenoxyethanol, benzoic acid, dehydroacetic acid.

EGYFIL – SIGMOLECS® SH-Polypeptide 6

EGYFIL contains SIGMOLECS® SH-Polypeptide 6, a single chain synthetic human peptide, produced by fermentation in *E.coli*. The starting gene is a synthesized copy of the human gene which codes for **Interleukin 10 (IL-10)**

- IL-10 was shown to have antinociceptive action in various models of pain through "microglial β-endorphin expression"[1]
- IL-10 has a well-known inhibitory effect on inflammation [2,3]
- Targeting injury-induced inflammation IL-10 can effectively limit injury induced pain behaviours [4]

1. H.-Y. Wu et al., 'Spinal interleukin-10 produces antinociception in neuropathy through microglial β-endorphin expression, separated from antineuroinflammation', Brain, Behavior, and Immunity, vol. 73, pp. 504-519, Oct. 2018.
2. 2. K. C. El Kasmi et al., 'Cutting edge: A transcriptional repressor and corepressor induced by the STAT3-regulated anti-inflammatory signaling pathway', J. Immunol., vol. 179, no. 11, pp. 7215-7219, Dec. 2007
3. F. Willems et al., 'Interleukin-10 inhibits B7 and intercellular adhesion molecule-1 expression on human monocytes', Eur. J. Immunol., vol. 24, no. 4, pp. 1007-1009, Apr. 1994.
4. J. A. Plunkett, C. G. Yu, J. M. Easton, J. R. Bethea, and R. P. Yezierski, 'Effects of interleukin-10 (IL-10) on pain behavior and gene expression following excitotoxic spinal cord injury in the rat', Exp. Neurol., vol. 168, no. 1, pp. 144-154, Mar. 2001.

EGYFIL – SIGMOLECS® SH-Oligopeptide 1

It also contains SIGMOLECS® SH-Oligopeptide 1, a single chain synthetic human peptide, produced by fermentation in E.coli The starting gene is a synthesized copy of the human gene which codes for **Epidermal Growth Factor (EGF)**

- EGF applied topically acts on vascular pathways to reduce swelling and to induce fibroblasts and keratinocytes to repair without fibrosis.
- In EGYFIL, SH-Oligopeptide-1 works to enhance vascularization of tissue, thereby reducing edema. Applied topically, it will sustain or guard against the formation of edema, thereby helping to prevent secondary pathways that can cause claudication and pain.

1. Stoll SW, et.al. Heparin-binding EGF-like growth factor promotes epithelial-mesenchymal transition in human keratinocytes. J Invest Dermatol 2012 May 17.
2. Ammann KR, Slepian MJ. Vascular endothelial and smooth muscle cell galvanotactic response and differential migratory behavior. Exp Cell Res. 2021 Feb 1;399(1):11244.
3. Steucke KE, Tracy PV, Hald ES, Hall JL, Alford PW. Vascular smooth muscle cell functional contractility depends on extracellular mechanical properties. J Biomech. 2015 Sep 18.
4. Serrentino JO. The Cytokine Handbook. 2012
5. Kalay Z, Cevner SC. Oxidant and antioxidant events duding epidermal growth factor therapy to cutaneous wound healing in rats. Int Wound J 2011. Dec 1.
6. Abe M, Yokoyama Y, Ishikawa O. A possible mechanism of basic fiboblast growth factor promoted scarless wound healing. The induction of myofibroblast apoptosis. Eur. J Dermatol 2012 Jan-Feb 22(1): 46-53.